

ANNUAL REPORT **2013**





FRANÇOIS DAGNAUD
Mayor of the 19th
arrondissement of Paris
Chairman of SYCTOM,
the metropolitan agency
for household waste,
from 2001 to 2014

For several years, SYCTOM, the metropolitan agency for household waste, has set itself the priority of reducing waste at its source by unveiling the “Metropolitan Waste Prevention 2010-2014” plan, and by helping its member local authorities with their local prevention programmes. With awareness campaigns and measures, supporting reemployment projects and promoting eco-design, to name just a few, the number of actions taken on our territory has multiplied, just like the number of answers to the new environmental and economic stakes involved in waste management.

While taking on this new role as a prevention coordinator, Syctom has focused its actions on developing sorting and recycling by offering financial support to its member local authorities, experimenting with types of waste collection and recovery, and commissioning effective waste sorting centres.

Alongside this, to ensure the continuity of public service, industrial heritage has been bolstered by large-scale works on existing equipment. New projects have been launched that aim to diversify waste processing methods and develop their recovery.

Syctom has undertaken this ambitious policy as part of its rigorous management, to which the small rise in municipalities' budgetary contribution and strong debt reduction testify. Syctom has also taken care to include it in a process of collaboration and mutualisation with all local partners. These solid bases today allow Syctom to look to the future with peace of mind, by concentrating on its unified urban ecology mission serving both local authorities and residents in the region.

Following these two terms of office during which I have had the honour and the privilege of chairing Syctom, I believe that all officials and teams can be proud of the progress we have made. Let us wish a smooth and successful road ahead for all of Syctom's new collaborators.



HERVÉ MARSEILLE
Senator of Hauts-de-Seine
Mayor of Meudon
Chairman of Syctom,
metropolitan agency
for household waste,
since 4 June 2014

Above all else, I would like to pay tribute to the wonderful personal qualities and brilliant work done by François Dagnaud during his two mandates. He has been an indefatigable chairman, researching a constructive consensus - something he has always known the value of - to federate the five territories of Syctom, the metropolitan agency for household waste, behind a common destiny.

Reading the report on Syctom's activities in 2013, I would also like to congratulate the teams for their commitment to the public service of eliminating waste and the many actions they have implemented, especially to meet the challenge of reducing tonnages.

New challenges await Syctom in the coming years: firstly, the governance that we must henceforth construct alongside the future Greater Paris metropolis. Like all major Parisian technical syndicates, Syctom must make its voice and its history heard, to be able to take its rightful place in the preparatory work on the metropolitan area that is coming into being. It is essential that citizens continue to be guaranteed high-quality public services when it comes to waste management, such as local authorities currently offer.

Syctom draws strength from its dialogue with all its local partners, to guarantee a coherent, efficient waste policy, while reinforcing collaboration with primary syndicates, SYELOM and SITOM93, developing mutualised processing methods with SIGIDURS (Val-d'Oise), SIEVD (Val-de-Marne) and even with other syndicates in the region.

Syctom has chosen tools that allow it to optimise territorial organisation, for instance the waste PACT (the Programme for Improving Collection and Processing), which will continue to be developed. Our efforts must also focus on the dynamism of all types of sorting, so we always recycle more and better, and of course on our capacity to renew our major processing tools that are closest to the waste produced in our territory.

More than ever, Syctom's policies must be based on its founding values, regional solidarity and consultation with local authorities, local organisations and inhabitants, and on the strong support of national and regional public authorities.

It is up to all of us newly elected officials to live up to these ambitions so that together we can make our mission a sustainable one, as society now requires.

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A public service in urban ecology on a metropolitan level

Syctom, the metropolitan agency for household waste, processes household waste in the most numerically and densely populated region in France. It conducts this public service mission in close collaboration with all those involved in improving the region and waste management. Bolstered by this collective approach, the organisation intends to make full use of its role as coordinator of the waste channel on future regional level.

SYCTOM'S SPHERE

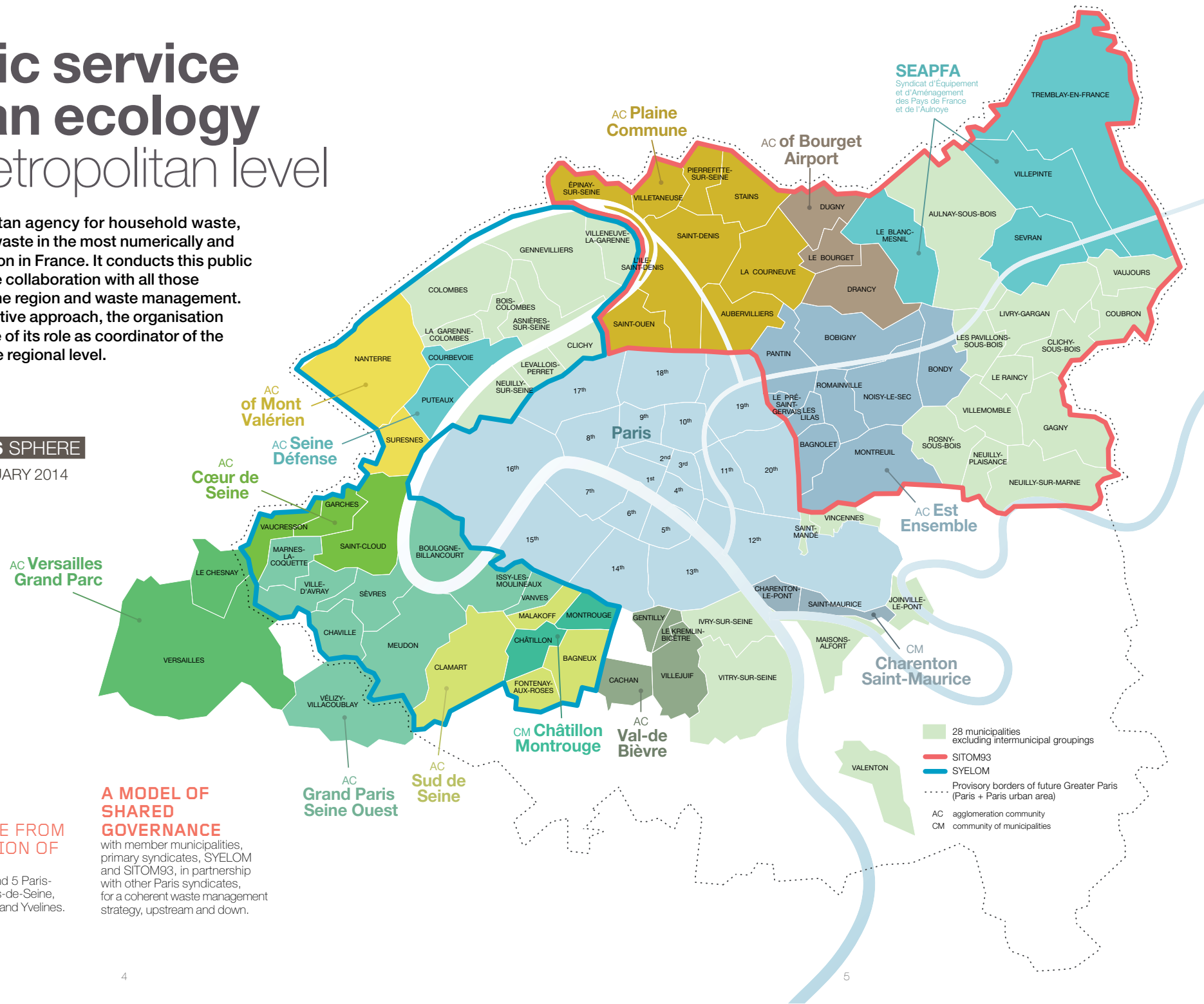
AS OF 1st JANUARY 2014

ONE MISSION: PROCESSING AND RECOVERING WASTE FROM HALF THE POPULATION OF THE PARIS AREA

spread over 84 municipalities and 5 Paris-region départements: Paris, Hauts-de-Seine, Seine-Saint-Denis, Val-de-Marne and Yvelines.

A MODEL OF SHARED GOVERNANCE

with member municipalities, primary syndicates, SYELOM and SITOM93, in partnership with other Paris syndicates, for a coherent waste management strategy, upstream and down.



Highlights 2013

CAMPAIGNS FOR RAISING PUBLIC AWARENESS



APRIL
As part of Sustainable Development Week, launch of the campaign "I think, therefore I sort", with ready-for-use information material made available to member local authorities and associations as well as a special events pack, "the sorting and recycling pack".

26 AND 27 JUNE
Syctom Green Tour to promote home composting, in the Aulnay-sous-Bois, Montreuil and Colombes catchment areas.

PLANS FOR A SORTING-METHANISATION CENTRE IN ROMAINVILLE

APRIL
New phase of dialogue to allow all local players to take part in carrying out a renewed project, following the decision by the Montreuil Administration Tribunal invalidating the authorisation for the initial project.

Launching a feasibility study to evaluate organic waste collections in the Romainville catchment area.

JUNE
Signature of a settlement agreement with the Urbaser group (contractor chosen for the design, construction and operation of the centre) that fixes the contract's management conditions, pending a decision from the new Syndicate Committee in January 2015.



2nd EDITION OF THE ZERO WASTE DESIGN COMPETITION

5 JUNE
Prize-giving for the four winning students of design, engineering, etc.

SUPPORT FOR LOCAL AUTHORITIES

MARCH
Implementation of indicators for selective collections results, local authority by local authority, to be distributed to inhabitants.

JULY
Signature of the regional collection contract with Eco-mobilier.



CENTRE AT IVRY/PARIS XIII

27 JUNE
Meeting of the **committee for monitoring the environmental quality guidelines** and of the partners' consultation committee.

12 JULY
Visit to the **methanisation factory at Varennes-Jarcy by the Watchmen**, officials and technicians of Ivry-sur-Seine and Syctom representatives.



WASTE SORTING CENTRE IN NANTERRE

5 NOVEMBER
Meeting of the **Committee for monitoring** the environmental quality guidelines.

PARTICIPATION IN EVENTS ON THE THEME OF SUSTAINABLE DEVELOPMENT

26 SEPTEMBER
CSR (Corporate Social Responsibility) discussion organised by the Caisse d'Epargne Île-de-France.

5 OCTOBER
Day for the Environment in Blanc-Mesnil.

PROJECT FOR THE CENTRE FOR THE RECOVERY OF ORGANIC WASTE AND WATER TREATMENT SILT AT BLANC-MESNIL/AULNAY-SOUS-BOIS

MARCH
Issuing the **1st information letter** about the project (and of the 2nd in November).
4 April: **Public meeting** in Blanc-Mesnil town hall.

FROM APRIL TO NOVEMBER
Organisation of themed workshops as part of the consultation initiated by Blanc-Mesnil with its inhabitants: 25 April on managing household waste and water treatment silt, 5 June on controlling odour nuisance risks, 27 June on recovering compost and biogas, and 4 July on the safety of installations and 13 and 27 November on drawing up the environmental quality guidelines. Visits to SIAAP's wastewater treatment plants by workshop participants: Seine-Morée (Blanc-Mesnil) on 16 May, Seine-Amont (Valenton) on 22 May and Marne-Aval (Noisy-le-Grand) on 18 September.

MAY
Website dedicated to the project put online.

OCTOBER
Feedback meeting for workshops and visits.



OPEN DAYS

6 APRIL
334 visitors to the sorting centre in Paris XV, as part of Sustainable Development Week.

25 MAY
93 visitors to the sorting centre in Sevran.

8 JUNE
227 visitors to the multi-channel centre Ivry/Paris XIII.

14 SEPTEMBER
259 visitors to the energy recovery unit in Saint-Ouen, as part of Heritage Days.

12 OCTOBER
584 visitors to the sorting centre in Nanterre.

23 NOVEMBER
570 visitors to the Isséane multi-channel centre as part of the European Week for Waste Reduction.

5,010 visitors welcomed during the year for installation visits.



EUROPEAN WEEK FOR WASTE REDUCTION

NOVEMBER
Deployment of the new kits for raising awareness to Syctom member local authorities about the sorting and recycling of used batteries and lamps and organising 54 large destocking operations in partnership with eco-organisations. Making 51 flags available to local authorities to improve the visibility of lorries on public contracts or of collection points for toxic waste in waste reception centres. For the 2nd consecutive year, installing two messages on waste reduction on the roof of the selective collection sorting centre in Paris XV.

Legislation

NATIONAL DEBATE ON ENERGY TRANSITION

16 FEBRUARY
Establishment of the first citizen committee
18 July: adoption of the summary of the discussion.
20 and 21 September: meeting of the Environmental Conference.

A BILL FOR MODERNISING OF REGIONAL PUBLIC ACTION AND STRENGTHENING URBAN AREAS

19 DECEMBER
Definitive adoption of the law
27 January 2014: promulgation of the law after referral to the Constitutional Council
26 December.

Deliberations of the Syndicate Committee

19 JUNE
Deliberations about Syctom's participation in financing an Airparif study, as part of a study programme about metal levels in the districts around Paris industrial sites, specifically the level of particle pollution and metals from the Ivry/Paris XIII site.

Approval of our new subscription agreement with the eco-organisation Ecofolio for the collection and elimination of print waste. The new cost scale is characterised by an even greater financial incentive to sort and recycle, and is also widening the kinds of paper that are eligible for recycling support.

Downward revision of fees 2013 (-€28.1M) for Syctom's member municipalities and inter-municipal groupings.

Launching competitive dialogue on the design market, construction market and operator market at the Paris XVII sorting centre.

4 DECEMBER
Urban integration in the Saint-Ouen centre in the Docks neighbourhood: launch of an agreement for the contracting works relating to dry emissions treatment.

Waste Management

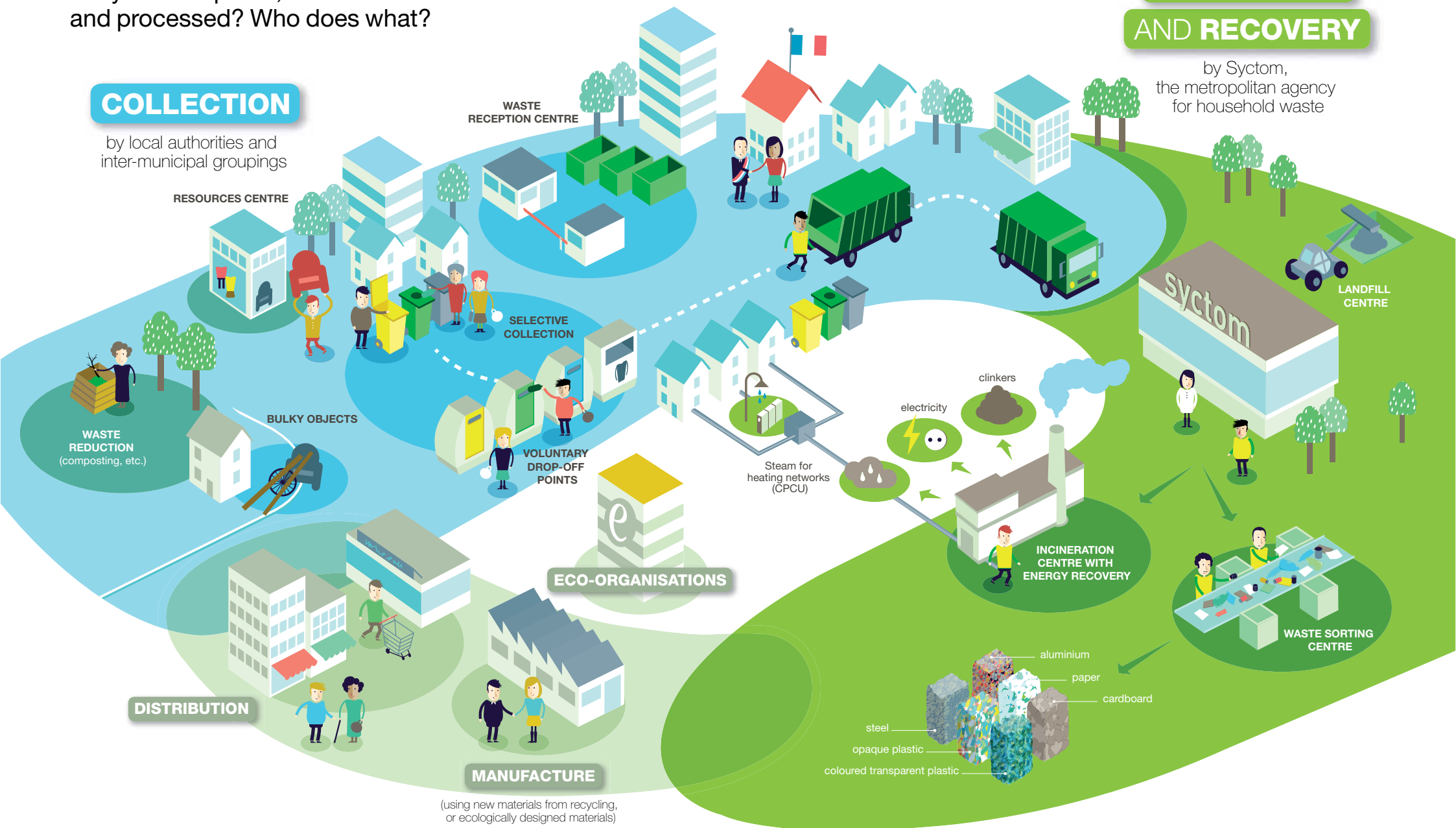
In Syctom's sphere, how is waste collected and processed? Who does what?

COLLECTION

by local authorities and inter-municipal groupings

PROCESSING AND RECOVERY

by Syctom, the metropolitan agency for household waste



What waste is processed by Sycdom, and in what proportions?

When it comes to selective collections of packaging, recyclable paper and the household waste produced by the Paris region's 5.7 million inhabitants, Sycdom has an all-encompassing strategy: it ensures they will be processed in their entirety. On the other hand, other waste flows, like those from other reception centres or bulky objects, are only partially treated by Sycdom, which does not therefore have all the figures.

SELECTIVE COLLECTIONS

All selective collections of household packaging and recycling in its area are processed by Sycdom, first and foremost in its own sorting centres and in addition in external centres.

TONNAGE PROCESSED **168,198 t**

SELECTIVE COLLECTION RATIO 2008-2013



RATE OF RECYCLING 2013



The quantities of waste collected selectively has experienced a **downturn since 2012**. To rectify this, Sycdom and its member local authorities implemented a new sorting campaign in 2013. **The recycling rate continues to rise**. This result is explained by a reduction in sorting errors and better detection in centres.

GLASS

Glass collected by member local authorities is sent directly to recycling companies without passing via Sycdom. Sycdom does, however, have information on this flow because it pays Eco-Emballages support to local authorities.

GLASS COLLECTION RATIO 2008-2013



2013 TONNAGE



Even if glass collection has remained **relatively stable since 2008**, collection rates are not advancing as much as they could. Glass is still present in household waste up to a rate of 6.5%, or more than 100,000 tonnes that are not recycled.

SYCDOM'S WASTE RECEPTION CENTRES

Residents have 33 waste reception centres at their disposal throughout Sycdom's territory. Only two are managed by Sycdom.

2013 TONNAGE



RECOVERY RATE 2013



Tonnage from both of Sycdom's waste reception centres have **reduced slightly** between 2012 and 2013. On the other hand, **the recovery rate has remained stable, at 50%**.

BULKY OBJECTS

Bulky objects include waste collected door-to-door or in waste reception centres, from fly tipping and from technical services. Given the disparity of organisations from one local authority to another, only part of this waste is processed by Sycdom. The other part is managed directly by local authorities as part of their contracts with external operators.

TONNAGE PROCESSED **172,847 t**

TONNAGE 2012-2013



RECOVERY RATE 2012-2013



The quantities of bulky objects **processed by Sycdom increased** in 2013. At the same time, **the recovery rate has increased** significantly, thanks to the improved performance of materials detection in dedicated sorting centres.

RESIDUAL HOUSEHOLD WASTE

Residual household waste is fully processed by Sycdom in its own incineration centres with energy recovery or in external centres, or in addition in storage installations.

TONNAGE PROCESSED **1,942,180 t**

TONNAGE 2012-2013

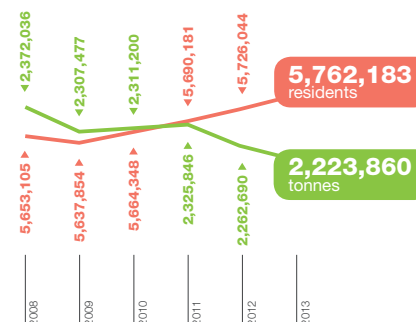


In parallel with the overall reduction in waste, **the share of residual household waste has continued to decrease**. Particularly noteworthy is the presence of toxic waste, which, at up to 0.7%, is still too high. This means more than 10,000 tonnes are not processed by their dedicated subsidiaries.

QUANTITIES OF WASTE PROCESSED*

Household waste
+ Bulky Objects
+ Selective Collections

POPULATION OF SYCDOM'S SPHERE**



Despite the rising population in its sphere, the quantity of waste treated by Sycdom is decreasing, with a **strong reduction in 2012**. This result comes as a reward for the prevention efforts made by Sycdom and its member local authorities, in an admittedly difficult economic climate.

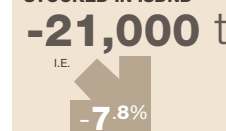
* change noted over a contiguous area of 76 municipalities
** population INSEE 2011 - including the municipal population (people with their usual residence in the region) and the population "counted separately" (people whose usual residence is in another region but who have a residence in the region: students, military personnel, persons in retirement homes, persons in penal establishments, etc.) - to which we apply an annual average coefficient of 0.63% per year to assess the population in 2013.

Landfill

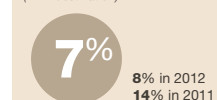
Sycdom uses storage installations for non-dangerous waste (ISDND) for:

- a share of residual household waste,
- refuse from sorting bulky objects (non-recyclable materials).

2012-2013 CHANGES IN TONNAGE STOCKED IN ISDND



SHARE OF LANDFILL IN 2013'S PROCESSING METHODS (in 1st destination)



The percentage of waste that ended up in landfill fell considerably between 2011 and 2013, to the extent that landfill now accounts for just 7% of processing Sycdom does, with recycling and energy recovery being favoured instead.

ACTING UPSTREAM OF PROCESSING

In an era of resource scarcity, the stakes do not just involve processing waste, but also limiting its production at source, and improving its collection for better recycling. Syctom thus acts upstream, alongside its member local authorities, using two planning tools: the “Waste PACT”* since 2012 and the “Metropolitan Waste Prevention 2010-2014” plan. Waste reduction and reuse actions carried out in this framework, although against the backdrop of a difficult economic context, have allowed the Grenelle environmental waste reduction objectives to be achieved.

31 Syctom local authorities committed to a Local Prevention Programme, or **92% of the population with cover**, not far from the objective for 100% by the end of 2014.

-8.5% of waste produced per inhabitant (household waste, selective collections, glass) **between 2008 and 2013**, which goes beyond the objectives set by the Grenelle laws (-7 % of waste/person). These results are proof of positive change in household practices.

-9 kg / person of residual household waste between 2012 and 2013.

* Waste PACT
a programme for improving waste collection and processing

IMPLEMENT THE METROPOLITAN WASTE PREVENTION 2010-2014 PLAN

in collaboration with ADEME and the Paris region, complementing the actions of primary syndicates (SITOM93 AND SYELOM).

UNIFY AND OPTIMISE ORGANISATION OF WASTE COLLECTION AND PROCESSING

while respecting the skills of every local authority via the Waste PACT (the Improvement Programme for Collecting and Processing waste) adopted in 2012.

ENCOURAGE WASTE SORTING

with a view to the regional objective of 47 kg / person / year by 2019.





HELPING LOCAL AUTHORITIES

A TRAINING PROGRAMME FOR NEW SORTING AND PREVENTION AMBASSADORS

At the end of 2013, Syctom organised a training programme of three half-days destined for new sorting ambassadors for the first time. Offered free to member local authorities, it aims to provide common tools and discourses to the new agents, but also to create an exchange dynamic. 16 new sorting ambassadors from 8 member local authorities took this training course. New sessions are planned for 2014.

METHODOLOGICAL SUPPORT

Coaching and training

Syctom has developed its coaching methods to help local authorities with the implementation of their local prevention programmes. 14 local authorities have called on this methodological assistance presented by the INDDIGO research bureau, and 57 interventions were carried out. In 2013, 14 new training modules were offered to the authorities. A “prevention pitch” in particular was developed to help sorting ambassadors to move from talking about sorting to talking about prevention. Two joint sessions were trialled in June and July and will be repeated in 2014.

Valued and shared practices

The committees for monitoring prevention plans are the occasion to discuss successful experiences and to share good practices. The annual steering committee for the Metropolitan Waste Prevention 2010-2014 plan was held on 15 January. The two departmental seminars were organised on 11 April with Aulnay-sous-Bois



Training session for sorting ambassadors on 24 September 2013

in partnership with SITOM93, and on 2 July in the centre in Levallois-Perret in partnership with SYELOM.

The 2013 campaigns to raise awareness as part of Sustainable Development Week (“I think, therefore I sort!”) and the European Week for Waste Reduction (used lamps, bulbs and batteries) were also presented to communicators, environment-waste technicians, sorting ambassadors from member local authorities and regional associations during Syctom’s Morning Sessions.

Finally, to improve the quality of glass collections, two “Glass Ecojourneys” were organised with Éco-Emballages in July and September. These days allowed about twenty local authorities and some thirty agents from the City of Paris to discuss the subject with technicians from the recycling channel and to visit the glass processing factory at Rozet-Saint-Albin in the Aisne.

Specially adapted training sessions

As part of the “50,000 composters” operation, 59 people (agents from local authorities, residents, association members, etc.) took practical composter guide training sessions in 2013. For authorities already part of the programme, 12 review sheets were drawn up. 13 new local authorities have joined the composting programme, which represents 32 out of 48 authorities suitable for collection. 7,000 new composters were ordered in 2013, which brings the number of households who compost at home thanks to this initiative to 26,300.



Composter guide practical training on 2 April 2013

PREVENTION IN ACTION

Actions to raise public awareness

Syctom financed eight actions undertaken by local authorities at a total of nearly €90,000. It has also awarded grants for seven actions initiated by local players at a total of nearly €80,000.

Some examples of actions

Local authority projects:

- the educational project from **Maison de la Nature** from the Grand Paris Seine Ouest (GSPQ) agglomeration community to promote preventative behaviour among the wider public;
- Châtillon and its pilot experiment for reducing organic waste with chickens being made available for 30 households in the municipality;
- help to buy and maintain an electromechanical composter by CG94 to experiment with organic waste processing by composting in situ.

Actions by local players:

- **Logement francilien** and its “great bread twist” to make the residents of a neighbourhood in Aulnay-sous-Bois aware of food waste;

- the **Réserve des Arts** association and its presentation in Parisian art schools to awaken the students to the re-employment of materials and items;
- **APEDEC** (the Association of Eco-design professionals that brings together engineers and designers) and its commitment to eco-design, notably with the creation of a Fab Lab, a manufacturing laboratory that is collaborative and open to all.

Help with reemployment

Syctom has supported the creation of the municipal waste reception centre in **Pavillons-sous-Bois**, which among others has a dedicated reemployment chamber. To this end, the assistance funds have benefited from a 5% increase to finance installations (20% of the pre-tax total of expenses capped at €500,000 against 15%).

At the Ivry/Paris XIII waste reception centre, a partnership agreement has been signed with Emmaüs Liberté for the recovery of reusable objects. 2.5 tonnes of objects were thus collected from February to November 2013.



Promoting the dedicated Emmaüs re-use chamber at Syctom’s Ivry-sur-Seine waste reception centre



The great bread twist at Aulnay-sous-Bois



“WE ARE OFTEN CONFRONTED WITH VERY SIMPLE QUESTIONS OF THE TYPE “WHAT IS RECYCLING FOR?” THIS TRAINING ALLOWED ME TO FIND AN ARGUMENT SO I CAN GIVE CLEAR ANSWERS”

VÉRONIQUE OZOUX
Sorting Ambassador for
the Sud de Seine agglomeration community

7000
new composters
ordered in 2013

4
new resource centres
supported by Sycotm with up to
€72,230

€500,000
worth of support for
HPM projects
(High Potential Municipalities)



The Collecterie

A new resource centre in Montreuil

The Collecterie opened its doors in June 2013. Nine people with highly varied backgrounds were responsible for the site: teachers, a carpenter, a chair and furniture customizer, a rag-picker, a web designer, a careers adviser and a street educator. Over 400 m² they repair, transform and sell second-hand items and reworked pieces of furniture. "This is our trial year," explains Séverine Bellec, one of the co-founders. "We are helped by a research consultancy financed by Sycotm, which is helping us to draw up our 5-year business plan to guarantee our viability and plan for potential changes..." There is no shortage of ideas, like operation "Tritabroc". In the jumble sales of the Est Ensemble agglomeration community, there is a stand inviting passers-by to bring their old items (electronic devices, toys, furniture, and even their batteries), and stallholders can leave their unsold items at the end of the sale.

FIND OUT MORE
www.lacollecterie.org

AT MONT-VALÉRIEN, ALL SORTING BINS ARE YELLOW!

To simplify sorting, the Mont-Valérien agglomeration community wanted to make the colour of the collection bins more uniform, and install new sunken containers in Nanterre and Suresnes. The objective: increase multi-material and glass collections by 2% and limit the amount of waste. From October 2012 to September 2013, 32,000 wheellie bins for sorting and household waste were replaced and fitted with electronic chips. 29 sunken containers were installed for glass, 9 for household waste and 11 for packaging. A marketing campaign (posters, sorting memos, factory visits, articles in the local press, etc.) was set up to help with this change. Events took place in 48 classes and sorting ambassadors organised meetings with caretakers at the foot of buildings. A very fine analysis of the composition of rubbish during this project will allow targeted operations to be carried out to improve sorting performance.



Sycotm has also contributed to the installation of 4 new resource centres:

- The "Maison du Canal" in the 10th arrondissement of Paris,
- "Chic on resource" in the Val de Bièvre agglomeration community in Villejuif,
- "Paris Centre" created by Interloque in the 2nd arrondissement of Paris,

- The "Collecterie" in Montreuil.

To support this programme, €72,230 worth of grants were awarded in 2013. Financial support must not be more than 20% of expenditure and is capped at €500,000. Sycotm also guarantees the processing of rejects from the resource centres for free.

HIGH-POTENTIAL MUNICIPALITIES

Every year, a funding packet of €500,000 is dedicated to High-Potential Municipalities (HPM) to develop concrete actions to increase the quality and the quantity of

waste sorted for recycling. Support continued in 2013 with the deployment of four projects carried over from the previous year:

- **Gennevilliers:** the installation of sunken containers (cf. inset p. 19);
- **Agglomeration community of Bourget airport:** the installation of a sorting machine for bottles, small bottles and food cartons, inaugurated on 13 December 2013;
- **Agglomeration community of Mont Valérien:** the harmonisation of bin colours (cf. inset);
- **City of Paris:** instigating a programme to raise awareness in target sectors, currently being rolled out.



MAKING PEOPLE AWARE

EXPLAINING OUR WORK AND SHARING OUR PROJECTS

Sycotm is continuing its teaching and transparency policy aimed at the general public. In 2013, 6 open days and 349 group visits were organised at its treatment facilities. They are a chance to show and explain what happens to waste and so stress the importance of actions that become part of a daily routine. Sycotm also maintains dialogue with "Watchmen", volunteer residents who observe the impacts linked to the operation of centres, and to signal any potential damage.

Finally, Sycotm is committed to **several consultation approaches linked to its projects**: the transformation of the multi-channel centre at Ivry/Paris XIII, the planned centre for organic waste and silt from wastewater treatment at Blanc-Mesnil/Aulnay-sous-Bois, and the planned sorting-methanisation centre in Romainville. To allow all participants to get a complete idea of these projects, Sycotm endeavours to provide full answers to questions.



Open day at Isséane



Planned centre for the recovery of organic waste and silt from wastewater treatment at Blanc-Mesnil/Aulnay-sous-Bois

An exemplary consultation

2013 will have been a particularly rich year in the consultation process conducted in partnership with the town of Blanc-Mesnil by Sycotm and SIAAP, the two project leaders. From April to November, 3 site visits and 4 themed workshops were organised, with some 40 participants per workshop. These were a chance for residents and officials alike to get a better understanding of this project and its most complicated aspects. Once these workshops and visits were given in October, two new workshops were dedicated to drawing up environmental quality guidelines. To allow everyone to keep up with the project, a website was created and two information letters sent out, in March and November 2013.

FIND OUT MORE
projet.siaap.sycotm.fr

70

educational packs on sorting and recycling distributed to local authorities

5,010

visitors to Syctom's equipment during the open days (to the public) and group visits (building wardens, social landlords, schoolchildren, etc.), with a 48% increase since 2008



"I BRING MY LIGHTS, AND MY USED BATTERIES TO THE COLLECTION POINT"

From 16 to 24 November 2013, the campaign for sorting and recycling used lights and batteries was deployed over 41 municipalities in its sphere, with:

- 15,000 practical memos distributed,
- more than 3,000 posters and 75 presentation stands ordered by local authorities,
- 54 large destocking operations organised in Syctom's sphere, including one at the Isséane site.



"WE WANT TO SHOW RESIDENTS THE IMPORTANCE OF SORTING HARMFUL WASTE, BOTH FOR THE ENVIRONMENT AND THEIR WALLET. SYCTOM HAS ALSO CALLED ON US TO CREATE ANCILLARY OPERATIONS FOR CHILDREN."

JULIEN BILLIARD, Project Manager for eco-responsibility & waste prevention in Châtillon

FOCUS ON PREVENTION

As part of the "Metropolitan Waste Prevention 2010-2014 plan", Syctom is continuing its actions for raising public awareness on waste reduction. In 2013, the **focus was on** promoting home composting. Syctom's agents themselves went to meet residents thanks to the **Syctom Green Tour**. This operation has become part of the **"50,000 composters in 2014"** scheme, and of the "home composting" kit, thanks to which 42 presentations were given in 2013, allowing us to make around 15,000 people aware.

Syctom Green Tour

Syctom's agents leading the dance



A flash mob to promote home composting!

This unique operation involved 25 Syctom agents, who dressed as gardeners for the occasion. In the markets of Aulnay-sous-Bois, Colombes and Montreuil, they used their walking choreography to invite residents to follow them to the town's stand for a dancing, musical introduction to composting. Online videos, articles in the towns' municipal magazines, minibuses and service cars in the campaign's colours... Through these measures and more, the information was passed on to 60,000 people. For Syctom's part, setting a good example has caught on. A new flash mob was organised in January 2014 to promote the campaign about sorting and recycling batteries and lamps.

SORTING CAMPAIGNS

Faced with the necessity of boosting sorting in its sphere, Syctom has undertaken a vast campaign in close association with its member local authorities. Launched in April 2013 during Sustainable Development Week, it was released in multiple forms: 4000 "I think, therefore I sort!" posters, "ready-for-use" texts and visuals to supply websites and the areas' newspapers, 5 animated online videos, 50,000 waste ABCs and 70 educational packs. Produced in collaboration with local authorities, this tool won unanimous support for its playful, interactive nature, suitable for all audiences. Syctom plans



on making and distributing new sorting and recycling packs in 2014.

on making and distributing new sorting and recycling packs in 2014.



SUPPORTING COLLECTION MEASURES

STRENGTHENED MEASURES

Starting with the observation that in 2013, 25% of the 515,000 selective collection bins listed in Syctom's sphere had not yet **been made yellow**, Syctom decided to set aside €1 million by 2016 to allow the 30 volunteer municipalities concerned to change their bin lids. Marketing tools (posters, stickers, articles, etc.) must help support this change.



Connection to the pneumatic collection network at the Isséane centre

The use of pneumatic collection systems is continuing to grow over the area. The Grand Paris Seine Ouest (GPSO) agglomeration community has established a pneumatic collection network for household waste and selective collections near the Isséane sorting and waste recovery centre. Since October 2013, vacuum lorries have been collecting waste from the new Fort Numérique residences at Issy-les-Moulineaux to bring them to Syctom's centre. Eventually the neighbourhoods on the Seine will be directly linked by an underground network to a terminal in the heart of Isséane. This network is in its test phase until August 2014. In total, 8,500 inhabitants will be affected by this innovation.



"THE PROJECT HAS LAUNCHED A REAL SENSE OF DYNAMISM. THE INSTALLATION OF SUNKEN CONTAINERS HAS BEEN DONE ALMOST SYSTEMATICALLY WHENEVER WORK HAS BEEN PLANNED FOR THE MUNICIPALITY."

FARID OUAHYOUNE Project manager with the waste/collection department in Environmental Management for Gennevilliers



IN GENNEVILLIERS, THE SUNKEN CONTAINERS ARE WORKING

A High-Potential Municipality supported by Syctom, the municipality of Gennevilliers wished to install sunken containers located in 17 residences in urban renovation. Nearly 400 inhabitants are involved. At the end of 2013, 77 were already in service out of 85 planned (22 for glass, 24 for multi-materials and 39 for household waste). The latter were installed at the beginning of 2014. 15 non-project sunken containers were also installed in 2013 on other sites in the city. **The first results: a 2.8% increase in selective collections between 2012 and 2013.**

NEW TYPES OF WASTE COLLECTION BEING TRIALLED



"EXTENDING THE SORTING INSTRUCTIONS FOR PLASTIC PACKAGING SIMPLIFIES THE SORTING PROCESS. THIS INSPIRES THOSE PEOPLE WHO RARELY OR NEVER SORT THEIR WASTE."

MAUD GALBRUN
Co-ordinator leader for sorting at SEAPFA - Syndicat d'Équipement et d'Aménagement des Pays de France et de l'Aulnoye

Several pilot projects have been conducted in Syctom's sphere: among them, **the collection of frying oils from individuals**. In December 2013, Syctom signed an agreement with Ecologic Oil, a company specialising in the recovery and re-use of food oils from restaurateurs as a bio-fuel.

Starting with the observation that there was no such solution for individuals, the company offered to make a collection barrel available at the Ivry/Paris XIII waste reception centre. It is also responsible for its removal and replacement on request.



Experiment on the extension of sorting recommendations for plastic packaging

Sorting all plastic packaging in perspective

For 18 months, 10 municipalities in Seine-Saint-Denis and a Parisian arrondissement took part in a national experiment led by Eco-Emballages to widen sorting recommendations to all plastic packaging. This packaging will be maintained in the catchment area of the Sevrans sorting centre. The results of the experiment are very encouraging. This way, 83% of residents have found the instructions easier to understand and 86% easier to put into practice. As for selective collection, this has risen 8% between 2011 and 2013, which is an extra 2.3 kg per resident. In the bins, we noticed more traditional recyclable materials (packaging, cartons, etc), more new types of recyclable plastic packaging (pots, boxes, films, etc), and fewer sorting errors. This rise in collections did not require any more bins and did not cause any major difficulties at Sevrans sorting centre. On a national level, the Ministry for the Environment is considering spreading out these sorting instructions over the whole country.

SUPPORT FROM ECO-ORGANISATIONS

Syctom and Ecofolio signed a new agreement at the beginning of 2013 following the reapproval of the eco-organisation for paper, with the new instructions that "all paper be sorted and recycled". Moreover, Syctom has conducted a report into the potential of the office paper market (companies, organisations) in the 21 local authorities in its sphere. Over time, case studies and support from specialist offices will be proposed to help them tap into this variation in quality that is still a feature of household waste.

Syctom has also focused its attention on the development of **three new subsidiaries with extended producer's responsibility (EPR)** which were approved in 2013 concerning furnishing waste (FW), potential chemical waste (DDS), and health-care waste with infectious risk (DASRI);

17

waste reception centres fitted with a skip for furniture waste on 31 December 2013

30%

of bulky objects produced on Syctom's territory from all flow origins are furniture waste (2012 estimation)

70,000†
Volume of furniture waste (FW) estimated in 2013



Syctom / Eco-mobilier

A regional contract for furniture collection

On 28 June 2013, Syctom signed a regional furniture collection agreement (CTCM) with Éco-mobilier, the éco-organisation in charge of furniture waste collection and processing, approved on 26 December 2012.

It provides support methods of two kinds:

- an operational system under Éco-mobilier aiming to make a specific skip available in waste reception centres as well as organising the collection and processing of the tonnages collected, and providing operational support to local authorities;
 - financial support for FW flows collected unsorted with bulky objects, as part of the contracts managed by local authorities.
- This agreement also provides training for public servants and makes available the marketing tools required to inform residents. Syctom's syndicate committee has taken the decision to pay its member local authorities the financial support received from Éco-mobilier for the systems it has deployed in its sphere. Between 1 October and 31 December 2013, 17 of the 33 waste reception centres in the region were therefore fitted with a special skip meeting 66% of the estimated volume of FW passing through waste reception centres. 4 new waste reception centres were operational by the end of April 2014, bringing estimated volume cover to 74%.

FIND OUT MORE
www.eco-mobilier.fr

Health-care waste with infectious risks (DASRI)

Approved on 30 December 2012, the eco-organisation Dastri is in charge of health-care waste with infectious risks (DASRI) produced by patients who administer their own medication (syringes, catheters, needles, etc.). In 2013, Syctom facilitated dialogue between Dastri and the local authorities in its sphere to list existing collection points and to help this eco-organisation develop its network. Once the needle boxes distributed for free in pharmacies are full, they must be brought back to specific collection points (which can be found at www.dastri.fr). In particular, this new subsidiary aims to reduce the number of accidents that occur during the collection and sorting of this waste.

FIND OUT MORE
www.dastri.fr

Potential chemical waste (DDS)

On 20 April 2013, Eco-DDS was approved as an eco-organisation for potential chemical waste (DDS), i.e. chemical waste produced by households that pose a risk to health and the environment. Some municipalities have already made agreements with the eco-organisation, SYELOM in particular, where the scheme has been operational since 1st July 2013. DDS must therefore be brought in by residents into waste reception centres or as part of one-off measures (collection lorries).

FIND OUT MORE
www.ecodds.com



"FOR US, THE KEY IN THE COLLECTION OF FURNITURE WASTE IS TRAINING OUR STAFF. THUS FAR, THEY WERE USED TO SORTING WASTE BY ITS MATERIAL. FROM NOW ON, HOWEVER, OBJECTS HAVE TO BE SORTED BY FUNCTION."

ISABELLE LARDIN
Manager of the 3Rs mission (Reduce, Reuse, Recycle) for the City of Paris

PROCESSING AND RECOVERING WASTE

As of today, **the very core of Sycotm's role** - processing and recovering waste in the Paris region - must meet the imperatives of environmental and energy transition. While reinforcing its facilities, the metropolitan agency for household waste is preparing for the future via various innovative projects which are in the study and consultation phases. These projects are part of an overall vision to provide for the metropolitan area and have the same objective: ensuring that our equipment is best suited to the types and quantities of waste produced in the area.

SYCTOM'S INSTALLATIONS

High-performance equipment as close as possible to the collection sites

12 PROCESSING UNITS



6 selective collection sorting centres



2 waste reception centres



1 transfer centre for residual household waste



3 incineration units with energy recovery

In 2013, Sycotm also mobilised 22 private units

EQUIPMENT PROJECTS



2 sorting centres for selective collections in the 17th and 12th arrondissements of Paris



1 methanisation unit in Romainville to replace the transfer centre



1 river platform in Bobigny



1 organic and energy recovery centre to replace the incineration unit in Ivry/Paris XIII



1 centre for silt from wastewater treatment and organic waste recovery at Blanc-Mesnil/Aulnay-sous-Bois

DIVERSIFYING PROCESSING METHODS

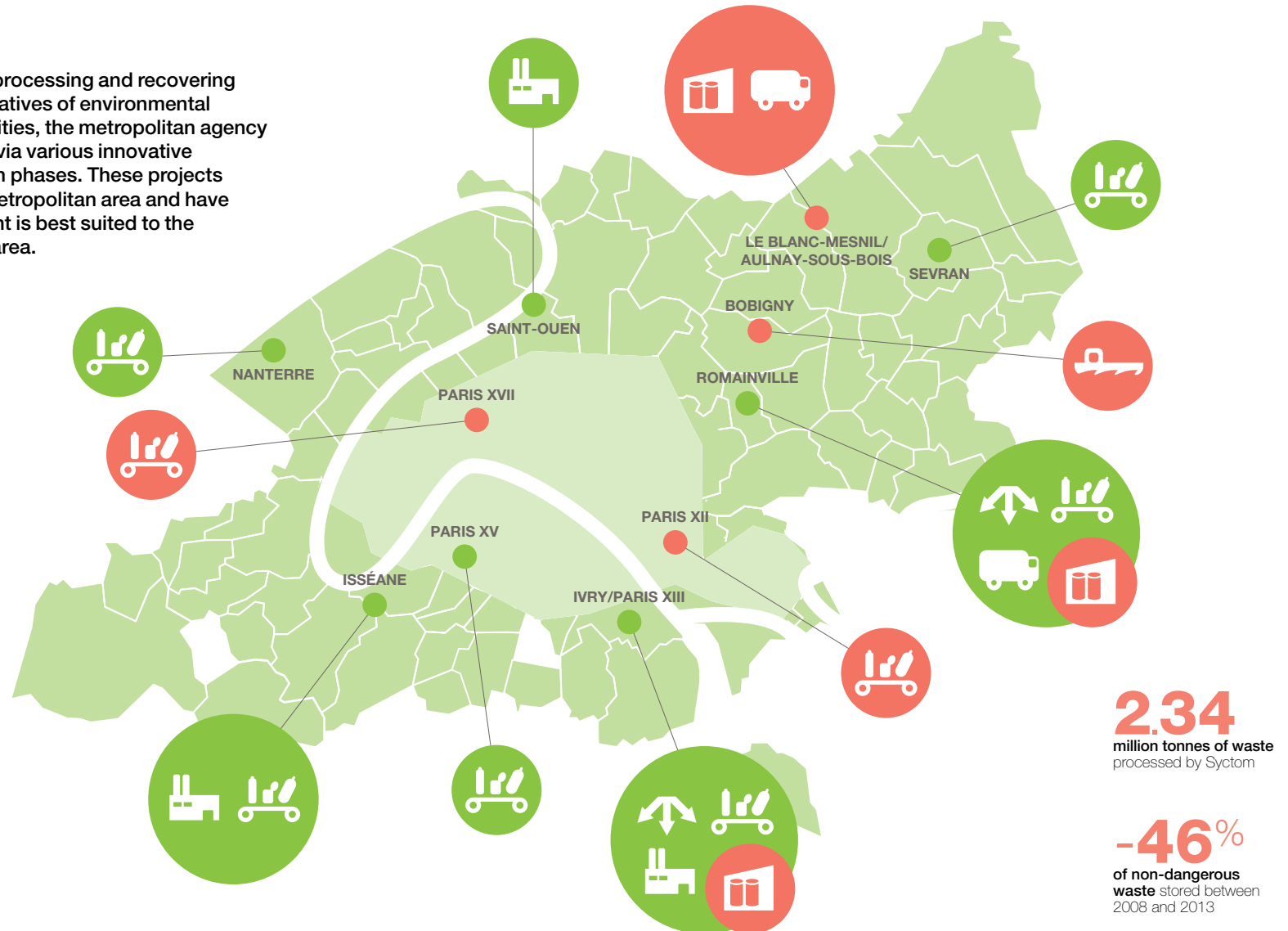
to put an end to landfill, by investing in equipment designed to optimise sorting recyclable objects and recovering household waste according to type, either as energy or compost.

ENVIRONMENTAL IMPACTS BROUGHT UNDER CONTROL BY

- being attentive to atmospheric, odour and noise emissions or liquid waste,
- constantly looking for improved technical solutions,
- using alternatives to road transport, waterway in particular.

PUBLIC CONTROL OF THE MEANS OF PROCESSING

by deploying equipment as close as possible to waste production sites, thus avoiding a situation where processing units are relegated to the outskirts of the region.





UPGRADING OUR EQUIPMENT

CONTINUALLY IMPROVING INSTALLATIONS

Like every year, Syctom has carried out continuous improvement works to maintain the processing quality and capacities of its installations and to guarantee the best level of safety for its property and personnel. Given the size of the assets to manage and the constant evolutions in regulation, a **quality approach** was put in place at the beginning of 2013 under the guise of regular preventive audits of regulatory conformity. An initial audit was conducted on the machines at Sevran sorting centre and led to a plan of action being produced. At the end of 2013, inspectors were chosen to carry out the audits at the Paris XV, Nanterre and Romainville sorting centre, as well as Isséane.

Since the **Romainville transfer and sorting centre was involved**, following the report regarding the decision about the project for a new centre, Syctom wished to guarantee that the current centre would continue to operate in the best conditions. A call for tender was launched for producing a diagnostic and a master plan for making the centre secure, as part of the "general studies and project management" framework

agreement implemented in 2013.

At Sevran sorting centre, works to make installations compliant were begun in 2013 concerning ATEX and lightning zones. The aim is to assess and control the risks relating to explosions in some atmospheres, and to guarantee the protection and security of workers.

As for the transformation project for the Ivry/Paris XIII Centre, the competitive dialogue phases focusing on the design-construction-operations contract were completed in 2013. Following a final series of hearings at the end of 2012, adjustments were made, in particular as regards processing capacity. Candidates were thus sent the final specifications in April 2013. Offers, received on 14 October, will be analysed, with a decision expected in 2014.

While this new centre is being completed, a new round of continuing improvement works for the existing centre was carried out in 2013, principally including the latest works for ATEX/lightning compliance, refurbishing communal areas and working on highways, car parks and green spaces.

LIMITED ENVIRONMENTAL IMPACTS

Syctom makes sure that the installations it owns are properly integrated into their surroundings and limits their environmental impact. This is particularly the case for the **household waste incineration centre with energy recovery at Saint-Ouen**,

initially built in an industrial area and today located at the heart of the urban development zone for the future Docks eco-neighbourhood. Urban integration studies, launched in 2010, concluded in June 2013 with the decision taken by the Syndicate committee

Incineration centre with energy recovery
for household waste at Saint-Ouen

Further improvements are planned

In the heart of Saint-Ouen's Docks neighbourhood, the centre will be transformed to better integrate into its new environment. Following the initial studies, the project validated by the syndicate committee includes landscape and architectural improvements, the reduction of the impact of collection trucks and the modification of the smoke treatment system. These modifications are doubled up with "functional" integration into the future eco-neighbourhood. The centre will welcome the central vacuum unit for the future pneumatic collection network for household waste and will provide the hot water for residents of the Docks eco-neighbourhood, produced by recovering waste heat from the factory's smoke treatment process. Works will be staggered from 2016 to 2020.

This summary image, associated with a study of scope, is a projection, and not the definitive plan.



SMOKE PROCESSING

1 Moving to a dry treatment system with a near-permanent disappearance of smoke fallout

IMPROVING HIGHWAY TRAFFIC

2 New entrance/exit for large goods vehicles and other vehicles
3 New access site for household waste collection skips
4 New garage for skips from the Mairie de Paris

ARCHITECTURAL AND LANDSCAPE INTEGRATION

5 New administrative buildings
6 Clinkers bed with transhipping towards the Seine
7 Creation of a park in front of the centre on the Rue Ardoin

DEVELOPMENT OF RIVER TRANSPORT

8 Creation of an automatic air crossing and transhipment scheme for the RD1

to support a €121 million (excl. tax) works programme (*cf. inset*). Furthermore, to reach the pollution cleanup standards required by future regulations, Syctom has begun the renovation of the residual and rainwater treatment system at its centre. The initial pipework, excavation and installation works for a hydrocarbon separator were completed in August 2013.

Syctom is continuing its **pro-active policy for measuring and supervising the impacts** of its energy recovery centres. Besides overseeing the continuous assessment and analysis of atmospheric emissions, operators call on the services of a laboratory accredited by the state twice a year at Ivry/Paris XIII and Saint-Ouen, and four times at Isséane. Beyond these regulatory assessments, Syctom also uses a state-accredited laboratory twice a year to analyse the pollutants listed in the regulation. In parallel to this, two new fallout monitoring campaigns were carried out in 2013, one using an Owen gauge system and the other analysing moss and lichen. The results show that emissions are far below regulatory thresholds, and revealed no particular impacts. These data, which can be consulted on Syctom's website, are sent to municipalities hosting

and bordering centres, to site monitoring commissions (CSS), to the committees for monitoring environmental quality guidelines, and to Watchmen.

In addition, and to provide better answers for the population local to these centres about health risks and odour emissions, Syctom signed a contract in 2013 to acquire **atmospheric modelling software**. This innovative tool will be a useful aid for taking decisions about modification or equipment creation projects.



"AS PART OF ITS COMMITMENT TO TOTAL TRANSPARENCY, SYCTOM IS NOT MERELY STICKING TO REGULATORY CHECKS. IT DOES SUPPLEMENTARY ANALYSES OF ATMOSPHERIC EMISSIONS FROM ITS CENTRES, IN INDEPENDENT LABORATORIES".

SOPHIE MAUVILLAIN
Director for Sustainable Development at Syctom



RECYCLING MORE AND BETTER

DEMANDING SPECIFICATIONS FOR OPERATORS

Besides social and environmental criteria, Sycotom has introduced performance clauses into its service contracts with external centre operators regarding material recovery. Those holding such clauses are required in particular to respect a minimum uptake rate for each recoverable material, or face penalties. Furthermore, since bulky objects are involved, sorting rejects created at the end of the line are charged to them alone. These incentives are encouraging improvements in terms of the results and the modernisation of equipment.

* PREDMA regional plan for the elimination of household and related waste

SOARING SORTING CAPACITIES

To anticipate the development of selective collections in accordance with the PREDMA* objectives, since 2012 Sycotom has been working on an optimisation programme to increase the capacity of its sorting centres: at Isséane, as part of the reclassification of the "bulky objects" line, at Paris XV to upgrade from 15,000 to 20,000 tonnes and at Sevrans to upgrade from 10,000 to 15,000 tonnes. Requests for modification to operating permissions were thus addressed to state services in 2013. As regards the reclassification of the "bulky objects" line at Isséane, a preliminary feasibility study was conducted and a contract for technical direction assistance entered into, with the aim of launching a works contract by the end of 2014.

The contract to operate the **Sevrans sorting centre** was renewed in 2013. Following the arrival of the new operator EHOL in February 2014, significant works are planned to improve its efficiency, in particular as part of the general widening of sorting recommendations for plastic packaging.



At the Nanterre sorting centre, modernisation works ongoing since 2011 were completed in 2013, with the replacement of the baler, the improvement of the supply to the sorting lines, the automatising of empty container sorting and the installation of scrap metal handlers on the waste centralisation line.

Furthermore, always aiming to increase its sorting capacities, Sycotom has continued with its **plan to construct a new sorting centre in the 17th arrondissement of Paris with 30,000 tonnes' capacity** (cf. inset). This centre entered a new phase in September 2013 with the launch of the competitive dialogue procedure for the design, construction and operation of the site. Works are expected to begin in the 3rd quarter of 2016 to be operational by the end of 2018.

168,198 t
sorted selective collections
(84% of which is from Sycotom's 6 sorting centres)

71%
Rate of recycling
for selective collections



Sorting centre for selective collections at Paris XVII

A second sorting centre in Paris is planned

Equipped with the latest automatic sorting technology, it will process 30,000 tonnes from selective collections every year, from several Paris arrondissements and nearby municipalities. In putting this centre in the Clichy-Batignolles eco-district, Sycotom has committed to respecting the specifications set by the City of Paris and the site developer. The environmental objectives are ambitious: limiting energy consumption, producing photovoltaic electricity, green roofs for rainwater management, sound treatment for the facade, etc. Once the project is complete, waste from the eco-district will be collected using a pneumatic underground collection system*, and newspapers and magazines will be taken away by rail transport, which will save the equivalent of 10 trailer trucks a week.

* The collection terminal will be annexed with the Sycotom sorting centre.

EXPLORING NEW MARKET OPPORTUNITIES

In partnership with its three purchasers, Sycotom continued to carry out several experiments in 2013, aiming to increase the amount of recycled materials or their added value.

Studies and tests at the UPM paper mills near Rouen were conducted to increase the quantity and quality of paper picked up in sorting centres in Nanterre, Paris XV or Isséane. New tests will have to be carried out following the completion of the modernisation works on these different centres.

PAPREC, Sycotom contractor for recovering the flow of mixed plastic packaging, has conducted tests to develop secondary sorting and improve "new plastics" recycling recovered in the Sevrans sorting centre. The results confirm the observations made by Eco-Emballages on a national scale. Extending recommendations also means increasing the quantity of the major plastic resins, PE (polyethylenes) and PP (polypropylene) recycled, without affecting the quality of these materials. On the other hand, recycling PET (polyethylene terephthalate) boxes, polystyrene pots and boxes means further improvements are needed to reach the purity level required by regenerators. The modernisation works on the Sevrans centre provided by EHOL will take this feedback into account.

Sorting tests for light aluminium and steel packaging carried out by the CELAA (Club for Light Aluminium and Steel Packaging) at the Nanterre sorting centre produced very positive initial results in 2013 (cf. inset).

Launched in December 2011, the tests on the **recovery of mattresses** ended in February 2013. 39,700 items issued from sorting centres for bulky objects working with Sycotom were entrusted to Recyc' matelas as part of the service contract. This specialist company, based in Limay (Yvelines), has managed to recycle up to 91 % of their different components. The focus is now on opportunities in the automobile and steel industries, and on manufacture of insulation. This has been a conclusive experiment on which Sycotom intends to capitalise as part of its development of the REP furniture waste (FW) subsidiary.

Another option explored: **recycling "rigid" plastics**, which represent 5 % of bulky objects entering centres. The automatising of sorting lines today makes it possible to consider industrially separating the different polymers they are made up of, with opportunities, in the automobile industry in particular. In June 2013, Sycotom began recyclability test in partnership with GALLOO and PAPREC. The first results, supported by complementary analyses from January 2014, reveal a potential for material recycling between 25 % and 50 %.

SMALL ALUMINIUM PACKAGING IN THE LOOP

Aerosols, boxes, lids, medical packaging, coffee capsules... packaging smaller than 65 mm were, until today, found in sorting rejects. This is a fairly significant loss given their aluminium content (50%). Since autumn 2012, when the experiment was launched, they have been recovered using a new separator, called an Eddy current. In this way 22 tonnes were recovered in 2013, doubling the production of aluminium packaging at the Nanterre centre. To improve recovery rates for these flows, discussions were held with France Aluminium Recyclage. Among the solutions considered: using pyrolyse techniques in a recycling unit based on the Franco-German border.



"WE HAVE A DOUBLE OBLIGATION WHEN IT COMES TO RESULTS. NOT ONLY DO WE NEED TO SORT EFFECTIVELY, WE ALSO NEED TO TAKE CARE OF THE QUALITY OF SORTED PRODUCTS."

PHILIPPE LAGRANGE
Director for Development of Local Authority Markets at CDIF,
operator of the sorting centre for bulky objects at Pierrefitte



TRANSFORMATION INTO ENERGY AND INTO RESOURCES

SUPPLYING ELECTRICITY NETWORKS OR URBAN HEATING

As is now stipulated in the SRCAE (Regional Climate, Air and Energy Plan) drawn up jointly with state, the region and ADEME services at the end of 2012, Sycotom's three energy recovery centres at Ivry/Paris XIII, Issy-les-Moulineaux and Saint-Ouen supply the public urban heating network with steam, thus recovering household waste in the form of heating and hot water. In 2013, Sycotom provided nearly 40% of the heat required for the public CPCU (Paris Urban Heating Company) network. The Docks eco-neighbourhood at Saint-Ouen will also be connected to this network.

According to the principle of co-generation, the steam recovered will also supply a turbine generator producing electricity. This electricity is used on-site in the

incineration centres to operate the installations, and any excess is sold to EDF.

Energy recovery centre
in Ivry/Paris XIII

A compulsory purchase contract signed with EDF

Since the compulsory purchase contract (OA) for electricity produced by the centre in Ivry/Paris XIII terminates on 31 January 2014, Sycotom explored other options in 2013. Given the variations in electricity production at its centre, signing a new compulsory purchase contract with EDF was more beneficial to Sycotom than signing a contract with a free market buyer. Established for 15 years based on controlled prices, the EDF Compulsory Purchase contract offers higher returns and better long term visibility. An application was made with DRIEE (Regional Interdepartmental Department for the Environment and Energy) to obtain a certificate entitling the holder to the compulsory purchase of electricity. In the end, the contract was renewed on 1 February 2014.

Turbine generator
at the Isséane centre



Nearly
320,000
housing equivalents supplied with heat by
Sycotom's three household waste incineration
centres (one unit = the energy consumption
of a 70 m² house)

Nearly
335,000 t
of clinkers from burning waste

€**51.4M**
total investment
in energy recovery

BETTER TRACED AND SAFER CLINKERS

Materials from the combustion of waste are also recovered. Clinkers are treated to be used in public works, road construction in particular. Following the ministerial decree of 18 November 2011, regulation relating to their management has been strengthened, with more pollutants that must be measured, lower thresholds to respect and

increased traceability. This means Sycotom agreed a series of amendments to the service contracts with LME (Installation of Ageing and Development) operators to compensate them for the additional costs as a result of this legislation.



CLINKERS, A REAL SOURCE OF POTENTIAL

Market opportunities for clinkers decreased in 2013. This reduction is not just explicable by the reduced number of worksites in the Paris region, but also by the reticence displayed by some public project managers to use them. For Sycotom, recycling clinkers to make roads should improve thanks to the new legislation, since it guarantees that their quality will be more rigorously monitored. Local authorities and public project managers should be encouraged to make use of them as an effective alternative to taking raw materials from the natural environment.

STUDYING ORGANIC WASTE RECOVERY

To meet the challenge set by the authorities of reducing the amount of waste sent to landfill, and to optimise the local management of household waste, Sycotom has for several years been committed to recovering organic waste. In 2013, studies and a consultation were carried out for the three planned methanisation units in Blanc-Mesnil/Aulnay-sous-Bois, in Ivry/Paris XIII and in Romainville.

Since the planned energy and organic recovery centre in Ivry/Paris XIII was involved, a feasibility study on collecting organic waste was conducted by Sycotom throughout its catchment area. The first phase, evaluating the deposits of household and non-household waste, concluded in November 2013. On 29 November, the steering committee met to launch the second study phase: conducting a technico-

economic analysis of selective collections within collection bodies.

The planned sorting-methanisation centre in Romainville has been suspended, following the decision by the Administrative Tribunal of Montreuil to revoke Urbaser's operating licence as granted by the state. The licence was revoked on 14 April and concerns the initial project, which has since been adjusted, in particular with the integration of requests from officials from the Est Ensemble agglomeration community. The revisited project has entered a new phase of dialogue with all those involved in the debate so the organic waste processing strategy and the means to be put in place find a widely shared consensus. A decision from Sycotom's officials is expected in early 2015.



Catchment area of the centre in Romainville

A feasibility study on a separate collection for organic waste

During discussions on the progress of the project for a waste processing centre at Romainville, the Est Ensemble agglomeration community expressed a wish to further explore the question of the feasibility of an organic waste collection. Sycotom responded favourably by beginning a study throughout the catchment area of the centre in Romainville. Done in close collaboration with the municipalities in question, this study will give a precise idea of the potential flow of organic waste, as well as the technical and financial means required to implement a special collection or in situ composting of this organic waste. A sociological analysis of sorting habits will also be carried out as part of this study process. A call for tender was launched in November 2013. Results are expected in 2014.

SHARING OUR EXPERTISE

Faced with the major challenge of reducing waste, Syctom believes that every affected party needs to get involved. Furthermore, as part of efforts to set a good example, Syctom is extending this dynamic to the private sector by launching partnerships with parties that design, produce and sell consumer goods. Syctom shares expertise to encourage the growth of innovative, collective solutions, in keeping with the principles of a circular economy.



EXEMPLARY TEAMS

SETTING A GOOD EXAMPLE

Syctom's eco-exemplarity scheme was initiated in 2004 and continues to this day. Since 2012, it has been based around an **eco-responsible staff charter** which aims to raise awareness amongst staff and encourage them to reduce their environmental footprint in the workplace. It has been signed by 87% of Syctom staff and two working groups have been formed as a result: the first looks at composting and the other at paper and waste reduction, to help staff act in a way that reduces waste in the workplace or in the home.

In 2013, a **survey** was launched so that we could draw up an account of all the measures we have already put in place. The results were presented at the end of the year at a pleasant in-house "coffee and clementines" event. This was an opportunity to collect new signatures for the charter and ask staff which actions they would like to be developed in future. 90 staff members were interviewed:

- fruit and vegetable baskets in Syctom premises,
- collections for light bulbs and ink cartridges,
- provisions of IT material or telephone material, when renewed,



- better management of provisions in all service areas, favouring reuse,
- an energy assessment to see whether it is necessary to install heating systems that perform better and use less energy.

In addition to this in-house action, 25 volunteers from Syctom went out into the field to promote composting as part of the **"Syctom Green Tour"** (see inset p.18), in late June 2013. This was one of many efforts to set an example as part of the "Metropolitan Waste Prevention 2010-2014" plan.

FIRST REPORT ON THE EXAMPLE-SETTING EFFORTS AT SYCTOM

The survey was done in 2013 and it allowed us to evaluate how we have implemented environmental action. 75 out of 119 staff members were interviewed - 63% of our workforce. New action to take as part of the eco-responsible staff charter was known to 96% of staff. They carried out most of them, starting with waste sorting, use of public transport and use of tap water and water fountains. 45% composted waste.

A team of **119** employees and public administrative and technical agents

745 people employed by external operators that manage Syctom's processing centres



PROMOTING A CIRCULAR ECONOMY



**"ECOLOGICAL CONCERNS
SHOULD BE AT THE HEART
OF DESIGN, AND JUST AS
IMPORTANT AS COSTS."**

FLORIAN DELÉPINE
(ENSCI - Les Ateliers)
Competition winner
Zero Waste Design 2013

SUPPORTING REUSE AND ECO-DESIGN

Syctom has shown itself to be a pioneer when it comes to the circular economy, supporting actions linked to reuse and eco-design. In 2013, it made a point of approaching schools and research centres regarding joint projects. Alongside the Rejoué association, the students worked on **packaging prototypes** for toys that were first collected, repaired and then resold. There were **awareness-raising campaigns** about reuse in art and design schools, with la Réserve des Arts. In June 2013, the **Zero Waste Design competition** again rewarded students for their efforts in eco-design.



The jury for the Zero Waste Design competition,
23 April 2013

Prioritising eco-design

2nd Zero Waste Design competition



Rethinking objects to reduce the amount of waste they imply, imagining new methods of consumption...

For the second consecutive year, students from the Paris region have carried out eco-design projects.

In total, 48 submissions were received from 7 schools: Camondo, ENSAD, ENSCI, Boule, Cergy Pontoise, Panthéon la Sorbonne, and Strate Collège. For the first time, professionals from industry and sales - Carrefour and Nestlé - were on the jury beside Syctom's charity and institutional partners and design specialists. Out of the 16 projects presented, 4 were awarded prizes on 5 June 2013:

- 1st prize: l'Université Populaire du Bricolage, by Florian Delépine (École nationale supérieure de création industrielle).
- 2nd prize: the Carry Bag, the "intelligent carrier bag", by Aurélie Radom (Paris I – Panthéon-Sorbonne).
- 3rd prize: the Platorond by Léa Mazy (Ecole Boule), to combat food waste in cafeterias.
- 4th prize, the special Syctom prize, was awarded to Marion Guerry and Emmanuelle Lépine (Camondo) for their "triple-age leather" (satchel, briefcase, backpack).

A total of €13,000 was shared between the winners' schools. The winner of 1st prize joined the "Réserve des Arts" team to develop his project.

THE DEVELOPMENT OF PARTNERSHIPS WITH LARGE CORPORATIONS

As part of Syctom's prevention policy, visits to sorting centres for selective collections with company representatives from industry and distribution were carried out in 2013. The objective: making those who put these materials "on the market" aware of eco-design and reducing packaging, lessening the harmfulness of products and using recyclable materials. A "**visitors' charter**" written by Syctom is now offered to companies to encourage them to commit to an eco-responsible approach.

A dozen large companies are already committed, like Bonduelle and l'Occitane. In 2013, a partnership was initiated with Nestlé.

In particular, this includes centre visits, **Nestlé's** participation in the jury of the Zero Waste Design competition, and studying the stages of eco-design, food waste and recyclable materials. Moreover, on 13 September 2013, Syctom took part in environment seminars organised as part of the group's sustainable development mission. Another partnership was undertaken with **Henkel**. Two Isséane visits were therefore organised at the end of November 2013 with the company's marketing, product and sustainable development engineers.



**"VISITS TO SYCTOM'S
INSTALLATIONS ALLOW
OUR EMPLOYEES TO GET
A REAL IDEA OF WHAT
HAPPENS. THEY ARE A
PRECIOUS HELP IN OUR
ECO-DESIGN APPROACH."**

ISABELLE BRUAUX
Environment and Sustainable
Development Packaging Manager
at Nestlé



PROMOTING OUR WORK

In parallel to its interventions on the ground, Syctom endeavours to make its actions and public service mission better understood by using numerous publications.

Among the most important, **Syctom mag**, a quarterly magazine published at 16,000 copies, delivers regular information on Syctom's policies and activities.

The **annual report** forms a detailed analytical annual assessment of the public service management of household waste processing. A 4-page summary document, the annual summary report, is also published.

The **website syctom-paris.fr** pursues a similar teaching and transparency objective to facilitate all audiences' access to information. The site had 182,477 hits in 2013 compared to 164,000 in 2012.

Syctom has also been analysing how to develop it, particularly to develop interactivity and exchanges with its users.

To this are added the **websites dedicated to Syctom's future projects**, which allow users to track their development and to have their voices heard in a public consultation. The Romainville project's blog had 1,527 visits in 2013 and the Blanc-Mesnil project's site, online since June 2013, had 1,284.

Syctom maintains **strong links with the press** by regularly publishing reports and press releases, by organising visits to its installations and by granting requests for reports.



Syctom mag



Syctom's website

THE NEW OFFICIALS

Syctom is run by a syndicate committee of 68 local officials representing all member local authorities, renewed following municipal elections in March 2014.

- It defines the Syctom's policy, votes on its budget, decides on investments to be made and the management methods used.
- It gives its opinion on requests for members and departures of local authorities.
- It elects the 36 members of the Bureau, which prepares Syctom's deliberations, as well as the 5 members of the Commission for Tenders (which falls under the authority of Syctom's Chairman).

Representatives of the City of Paris

75



FRANÇOIS DAGNAUD
Mayor of 19th arrondissement
1st Vice-Chairman of Syctom



MAO PENINOU
Deputy Mayor of Paris
5th Vice-Chairman of Syctom



ANNE SOUYRIS
Paris councillor
10th Vice-Chairman of Syctom



JEAN-FRANÇOIS LEGARET
Mayor of 1st arrondissement
13th Vice-Chairman of Syctom



PIERRE AURIACOMBE
Paris councillor



CATHERINE BARATTI-ELBAZ
Mayor of 12th arrondissement



HERVÉ BÉGUÉ
Paris councillor



JEAN-DIDIER BERTHAULT
Paris councillor



FLORENCE BERTHOUT
Mayor of 5th arrondissement



HÉLÈNE BIDARD
Deputy Mayor of Paris



JULIE BOILLOT
Paris councillor



JÉRÔME COUMET
Mayor of 13th arrondissement



VIRGINIE DASPÉT
Paris councillor



PHILIPPE DUCLOUX
Paris councillor



CLAIRE de CLERMONT-TONNERRE
Paris councillor



ANTOINETTE GUHL
Deputy Mayor of Paris



MARIE-LAURE HAREL
Paris councillor



ÉRIC HÉLARD
Paris councillor



HALIMA JEMNI
Paris councillor



VÉRONIQUE LEVIEUX
Paris councillor



JEAN-LOUIS MISSIKA
Deputy Mayor of Paris



ANNE-CONSTANCE ONGHENA
Paris councillor



PATRICK TRÉMÈGE
Paris councillor



DANIEL VAILLANT
Member of Parliament
Paris councillor

Representatives of SITOM93

93



WILLIAM DELANNOY
Mayor of Saint-Ouen
6th Vice-Chairman of Syctom



ALAIN PÉRIÈS
Mayor of Pantin
11th Vice-Chairman of Syctom



JEAN-PIERRE BOYER
Deputy Mayor of Rosny-sous-Bois
14th Vice-Chairman of Syctom



BERNARD CACACE
1st deputy mayor to the Mayor of Raincy



ANTHONY DAGUET
Deputy Mayor of Aubervilliers



ALAIN DURANDEAU
Deputy Mayor of Tremblay-en-France



CHRISTINE GAUTHIER
Deputy Mayor of Pavillons-sous-Bois



JEAN-PHILIPPE MALAYEUDE
Deputy Mayor of Neuilly-Plaisance



OLIVIER MICCONNET
Deputy Mayor of Livry-Gargan



LAURENT RUSSIER
Deputy Mayor of Saint-Denis



OLIVIER STERN
Municipal councillor of Montreuil



LUDOVIC TORO
Mayor of Courbron



STÉPHANE WEISSELBERG
Deputy Mayor of Romainville

● Members of the Bureau ● Permanent members of the CAO (Commission for tenders)



HERVÉ MARSEILLE
Senator-Mayor of Meudon
Chairman of Syctom



KARINA KELLNER
Chairman of SITOM93
Municipal councillor of Stains
2nd Vice-Chairman of Syctom



JACQUES GAUTIER
Chairman of SYELOM
Senator-Mayor of Garches
3rd Vice-Chairman of Syctom

Representatives from SYELOM

92



ANDRÉ SANTINI
Deputy Mayor of Issy-les-Moulineaux
4th Vice-Chairman of Syctom



PIERRE-CHRISTOPHE BAGUET
Mayor of Boulogne-Billancourt
12th Vice-Chairman of Syctom



OLIVIER MÉRLOT
Deputy Mayor of Gennevilliers
15th Vice-Chairman of Syctom



MARIE-DO AESCHLIMANN
Deputy Mayor of Asnières-sur-Seine



JEAN-PIERRE AUFFRET
1st Deputy Mayor of Cligny



PIERRE CHEVALIER
Municipal councillor of Ville-d'Avray



BERNADETTE DAVID
Deputy Mayor of Bagneux



SOPHIE DESCHIENS
Deputy Mayor of Levallois-Perret



ÉRIC FLAMAND
Deputy Mayor of Vaucluse



JEAN-CHRISTOPHE FROMANTIN
Deputy Mayor of Neuilly-sur-Seine



NICOLE GOUETA
Mayor of Colombes



JEAN-PIERRE SCHOSTECK
Mayor of Châtillon

Representatives of local authorities of Val-de-Marne

94



LAURENT LAFON
Mayor of Vincennes
7th Vice-Chairman of Syctom



PIERRE GOSNAT
Mayor of Ivry-sur-Seine
8th Vice-Chairman of Syctom



SAMUEL BESNARD
Deputy Mayor of Cachan



JEAN-MARIE BRÉTILLON
Mayor of Charenton-le-Pont



JEAN-LUC CADEDDU
Deputy Mayor of Maisons-Alfort



JORGE CARVALHO
Deputy Mayor of Villejuif



FLORENCE CROCHETON
1st Deputy Mayor of Saint-Mandé



JEAN-JACQUES GRESSIER
Deputy Mayor of Joinville-le-Pont



ALAIN GUETROT
1st Deputy Mayor of Saint-Maurice



MONIQUE RAFFAELLI
Municipal councillor of Kremlin-Bicêtre



PATRICK RATTER
Deputy Mayor of Valenton



BAMADI SANOKHO
Deputy Mayor of Gentilly



AGNÈS TEYSSERON
Municipal councillor of Vitry-sur-Seine

Representatives of local authorities of the Yvelines

78



PHILIPPE BRILLAUD
Mayor of Chesnay
9th Vice-Chairman of Syctom



MAGALI ORDAS
Deputy Mayor of Versailles

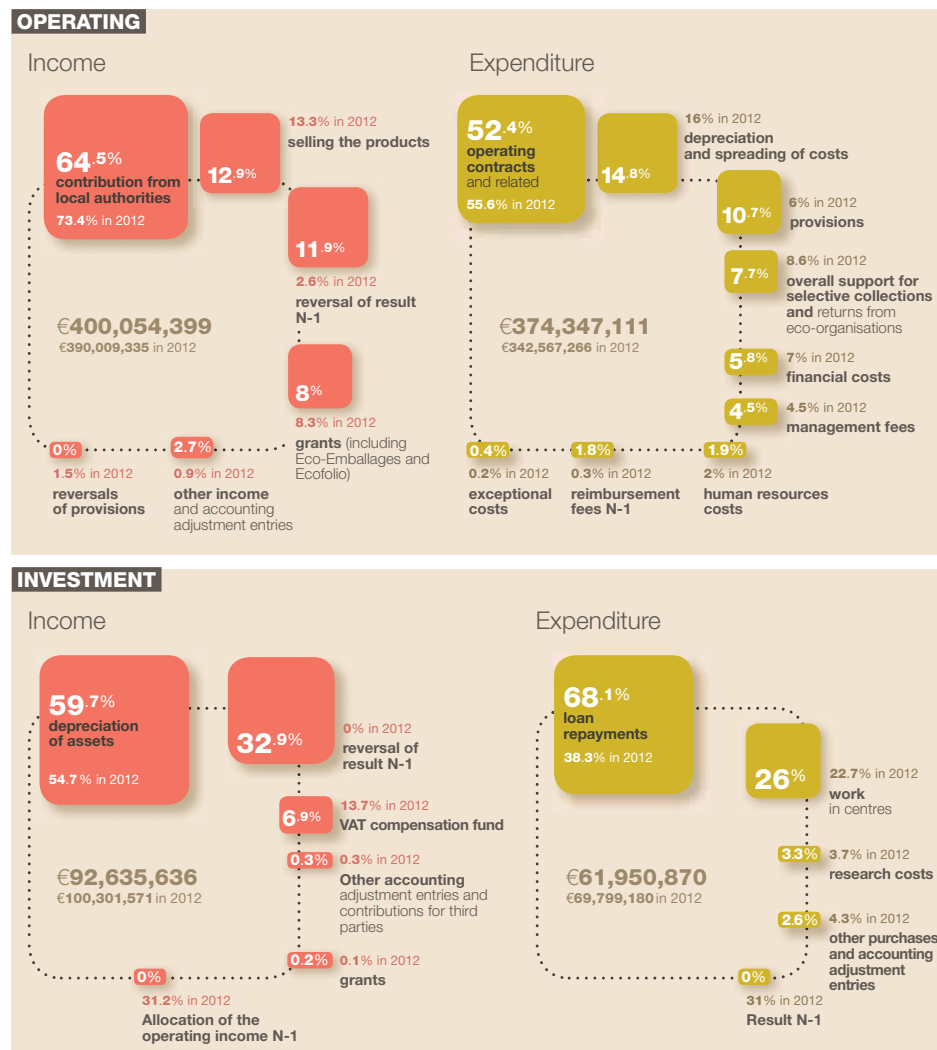


FRÉDÉRIC HUCHELOUP
Deputy Mayor of Vélizy-Villacoublay

Healthy Financial Indicators

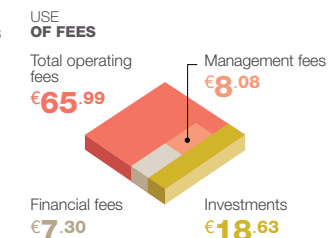
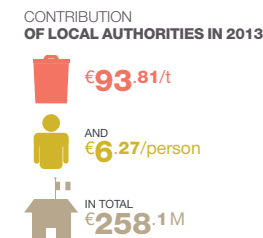
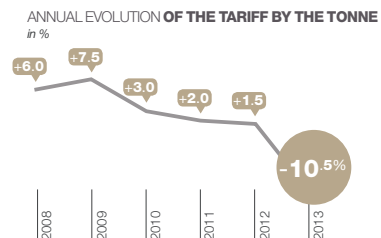
For the fourth consecutive year, 2013 was marked by a reduction in fees from Syctom's member local authorities. In a difficult economic context, Syctom's financial skill and rigorous management have meant it has been able to reduce the overall cost of processing, while preserving its ability to make medium- and long-term investments.

Key figures 2013*



* These figures use the 2013 administrative account

CHANGE IN FEES

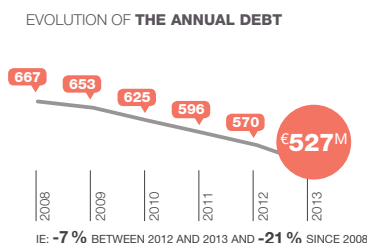


Operating report

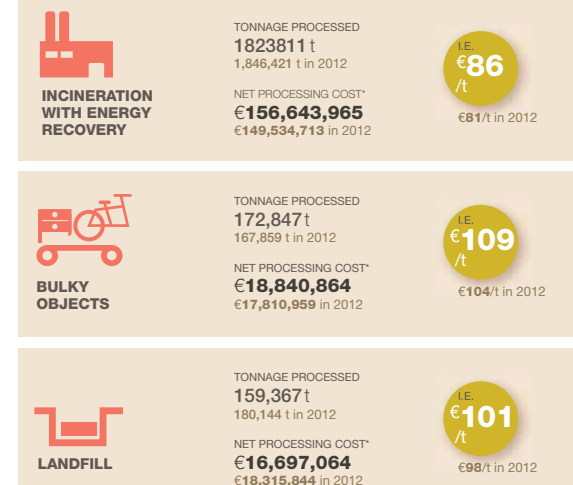
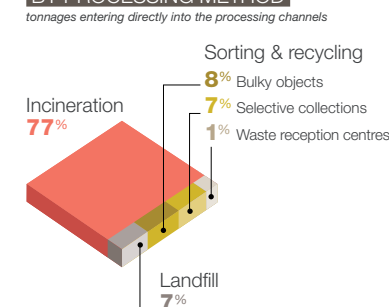
PROCESSING COSTS



CONTINUING DEBT REDUCTION



BREAKDOWN OF TONNAGES BY PROCESSING METHOD

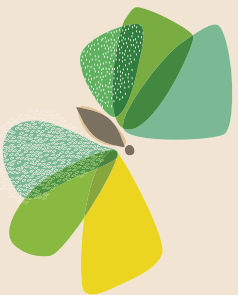


* The net processing cost corresponds to the sum invoiced by Syctom to local authorities for processing their waste.

FIND OUT MORE See attached Technical and Financial Report

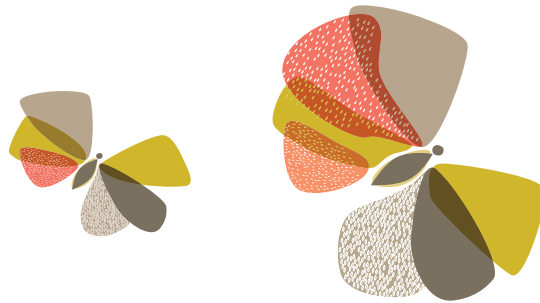
Publication director **Hervé Marseille** | Editor in chief **Dominique Labrousche**
| Communication director **Véronique Menseau** | Coordinator **Christelle Pichon**,
Julien Bieganski | Photo credits **Syctom**, the metropolitan agency for household waste/
Jean-Luc Vallet / **Stéphane Collin** / **David Templier** / **Jean-François Humbert** /
Thierry Dehesdin / **Nicolas Gornas** / **Julien Wieser** / **Nicolas Périer**; **Eco-Emballages** /
Pierre Antoine / **William Alix** / **Sipa Press**; the City of Meudon / **Julien Berkovitch**;
Théma_Design; **APOR** / **DO Architecte**; the City of Paris / **Anaïd de Dieuleveult**;
the City of Levallois; the City of Gennevilliers; **SEAPFA**; **Eco-mobilier**; **Fotolia**; **Delphine Ozoux**;
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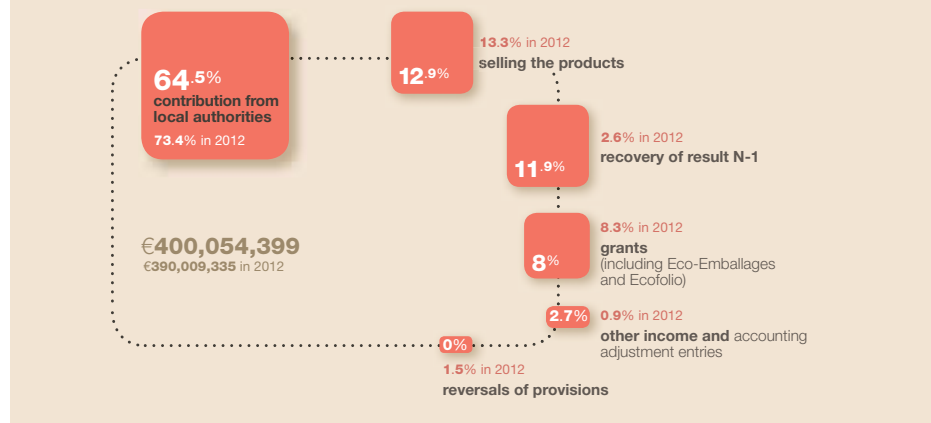


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TECHNICAL
AND FINANCIAL
REPORT
2013



Operating Income 2013

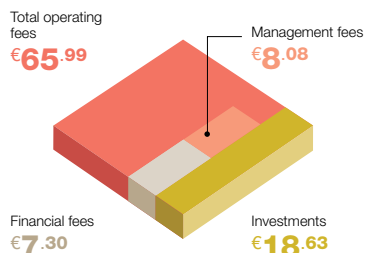


LOWERING FEES

Syctom wanted its member local authorities to benefit from the savings made over the past few years: a gain of €13M/year since 2011 on treatment costs at the Ivry/Paris XIII centre, a reduction in tonnages treated since 2008, a spread in the equipment programme, and so on. This way, the requested contributions for the year 2013 have been significantly reduced.

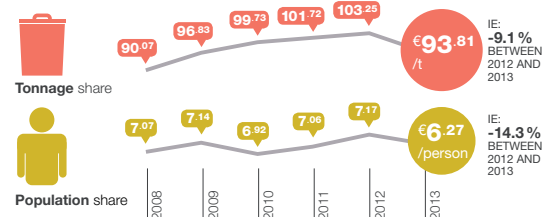
USE OF THE FEES

for €100

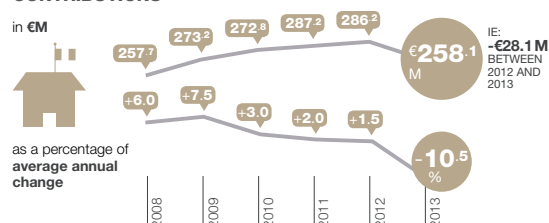


CHANGE IN THE SUM OF FEES

Calculated pro rata from the quantity of waste these fees bring to Syctom and from the population of each municipality or inter-municipal grouping.



CHANGE IN LOCAL AUTHORITIES' CONTRIBUTIONS



STABLE INCOME

SALE OF PRODUCTS AND SUPPORT FROM ECO-ORGANISATIONS

The products sold recover steam and electricity from energy recovery centres and the various materials from selective collection, bulky object and household waste incineration sorting. **Income for 2013 is largely equivalent to that in 2012.** Good performance in terms of energy recovery offset the reduction in material recovery, due to the joint reduction in tonnages from

selective collections (-2.5% in 2013) and in prices for recovering recyclable materials. Aid from eco-organisations and other financiers are also stable in 2013. With furniture ERP established on 1st July 2013, Eco-mobilier's support has been added to Eco-Emballages and Ecofolio's.

Expenditure 2013



OPERATING CONTRACTS AND ASSOCIATED EXPENSES



Factors contributing to the increase in costs include:

a **20%** increase in TGAP on incinerations (€4/tonne excluding tax in 2013, compared with €3.20/tonne in 2012),

the establishment of a **fee for water storage** at low water levels, payable by owners or concessionaries of water storage facilities equal or superior to one million m²,

the effect of increasingly tough regulations regarding **clinkers**.

SUPPORT FOR SELECTIVE COLLECTIONS AND RETURNS ON AID FROM ECO-ORGANISATIONS



In 2013, Syctom reinforced its financial efforts to help member local authorities with **€125.89 per tonne** from selective collections. Beyond a simple bareme E return from Eco-Emballages implemented in 2011, Syctom offers **€1.5M/year** to support local authorities. Returns to local authorities thanks to new support from Éco-mobilier in 2013 should also be noted. The decrease is explained largely by the reduction in quantities coming from selective collections.

HUMAN RESOURCES COSTS



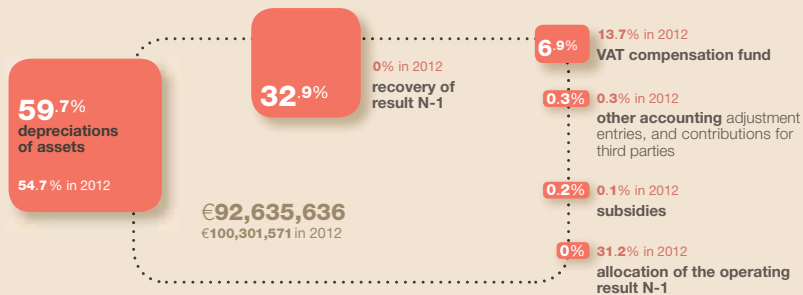
With a stable workforce of **119 people** as of 31 December 2013, human resources costs still make up **2%** of Syctom's operating expenditure - **€7.3M** in 2013.

DEPRECIATIONS



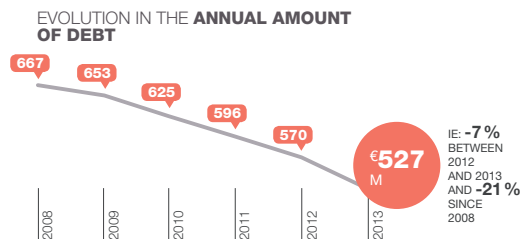
Depreciations amounted to around **€55M** in 2013, which is only a very minor change compared to 2012. Their significant level (**15% of operating costs in 2013**) means that the investment sector is guaranteed strong self-financing capacities, which is important given the aim of limiting Syctom's future debts.

Investment Income 2013



CONTINUING DEBT REDUCTION

For the 5th consecutive year, Syctom reduced its debt, specifically with a reduction of **€42.2M** in 2013. In December 2013, the average interest rate on Syctom's debts was 3.98%, compared against 4.01% in 2012. This relative stability is explained by the share of loans made at a fixed rate (65%). Syctom's financial charges went from €23.8M to €21.7M, a reduction of €2.1M (-9%) due to the reduction in the outstanding debt and the historically low variable rates in 2013.



Expenditure 2013



INVESTMENTS IN THE STUDY AND CONSULTATION PHASE

In 2013, expenditure on equipment and research came to **€18M**, an identical sum compared with 2012. This year was notably dedicated to pursuing competitive dialogue regarding the **reconstruction of Ivry/Paris XIII** and the projected centre in **Blanc-Mesnil/Aulnay-sous-Bois**.

As for the Romainville project, consultations are ongoing. Because these phases dedicated to research, audits, consultations and dialogue are naturally less expensive than the physical work phases, the level of investment expenditure is relatively low.

Investment programme per site

CONTINUOUS IMPROVEMENT AND MAINTENANCE OF STANDARDS IN SYCTOM INSTALLATIONS

in €M (excl. tax)

SITES	WORK FINANCED IN 2013
ISSÉANE	1.73
IVRY-PARIS XIII	0.35
NANTERRE	0.10
PARIS XV	0.05
SAINT-OUEN	0.52
SEVRAN	0.05
TOTAL	2.80

WORK RELATED TO EXISTING INSTALLATIONS OR NEW PROJECTS

in €M (excl. tax)

SITES	NATURE OF THE PROGRAMME	OPERATING PERIOD	WORK FINANCED IN 2013	TOTAL INVESTMENT
ISSÉANE	construction of the incineration plant with energy recovery (balance of payment)	1998-2013	0.13	593.00
IVRY-PARIS XIII	work on extending the operating life of the centre	2008-2013	0.13	62.33
PARIS XV	construction of the sorting centre (balance of payment)	2003-2012	2.35	30.65
SAINT-OUEN	project to integrate the centre into the urban area - landscaping and architectural work and smoke-scrubbing	2012-2019	0.05	122.00
BLANC-MESNIL/AULNAY-SOUS-BOIS	project for a recovery centre for organic waste and silt	2006-2018	0.21	48.90
IVRY-PARIS XIII	project for a recovery centre for organic waste and energy	2007-2026	1.37	860.00
PARIS XVII	project for a sorting centre for selective collections	2010-2019	0.02	76.20
ROMAINVILLE/BOBIGNY	project for a sorting-methanisation centre	2005-2017	7.87	276.31
TOTAL			12.13	

GENERAL TOTAL OF INVESTMENTS

14.93

Annual report on the price and quality of the public service for eliminating waste

in application of decree no. 2000-404 of 11 May 2000. Technical and financial indicators for 2013
This document will be put to a vote by the Sycotom syndicate committee, the metropolitan agency for household waste, during its meeting on 25 June 2014.

SYCTOM PROCESSING UNITS AND TONNAGES PROCESSED

in tonnes



3 INCINERATION CENTRES WITH ENERGY RECOVERY	CAPACITY	TECHNICAL CAPACITY	QUANTITIES INCINERATED
ISSÉANE	460,000	460,000	459,825
IVRY-PARIS XIII	730,000	670,000	685,787
SAINT-OUEN	630,000	605,000	541,404



6 SORTING CENTRES			QUANTITIES RECEIVED
ISSÉANE	30,000	22,500	22,556
IVRY-PARIS XIII	36,300	30,000	28,568
NANTERRE	40,000	33,000	32,819
PARIS XV	15,000*	15,000	16,019
ROMAINVILLE	45,000	35,000	35,355
SEVRAN	10,000*	10,000	11,800

* Operating capacity modification requests under consideration



2 WASTE RECEPTION CENTRES		QUANTITIES RECEIVED
IVRY-PARIS XIII		5,995
ROMAINVILLE		11,387

OVERALL ANNUAL SUMMARY

NUMBER OF MUNICIPALITIES IN SYCTOM'S SCOPE	84
NUMBER OF INHABITANTS IN SYCTOM'S SCOPE	5,762,183
2011 population survey and supplementary surveys to 2013.	
GROSS TONNAGE OF WASTE	
Household waste, sweepings and green waste (in tonnes)	1,942,180
Bulky objects (in tonnes)	172,847
Requisitions (in €/tonne)	273
SELECTIVE COLLECTION (in tonnes)	
Newspapers and magazines, multimaterials, paper, cardboard	168,198
Glass	0
Waste reception centre	17,382
FEES (in Euros)	
Tonnage share	93.81
Population share	6.27

EXTERNAL UNITS USED BY SYCTOM AND TONNAGES PROCESSED

in tonnes



INCINERATION CENTRES	QUANTITIES RECEIVED
ARGENTEUIL (NOVERGIE)	37,152
CARRIÈRES/SEINE (NOVERGIE)	17,617
SAINT-THIBAUT-DES-VIGNES (NOVERGIE)	42,329
SARCELLES (SAREN VÉOLIA)	40,783



SORTING CENTRES	QUANTITIES RECEIVED
LE BLANC-MESNIL (PAPREC)	3,281 SC
BUC (NICOLLIN)	4,359 SC
BUC/CHATILLON (NICOLLIN/VÉOLIA)	17,311 BO
CHELLES (GÉNÉRIS)	5,385 SC
CHELLES (REP)	1,075 BO
CLAYE-SOUILLY (REP)	1,252 BO
LA COURNEUVE (PAPREC)	15,988 BO
GENNEVILLIERS (BM/SITA)	6,334 SC
GENNEVILLIERS (SITA)	8,361 SC
GENNEVILLIERS (SITA)	33,507 BO
GENNEVILLIERS (PAPREC)	26,916 BO
GENNEVILLIERS (PAPREC) A15	116 worksite BO
IVRY (DERICHEBOURG)	5,765 BO
IVRY (SOFRAT)	38,751 BO
IVRY (CEMEX)	1,683 BO
IVRY (CEMEX)	632 worksite BO
NOISY (DRT)	22,652 BO
NOISY (REP)	2,511 BO
NOISY (TRANSFER)	10 SC
PIERREFITTE (CDF)	12,130 BO
VILLENEUVE-LE-ROI (PAPREC)	279 BO

SC: selective collections BO: bulky objects



INSTALLATIONS FOR STORING HAZARDOUS OR NON-HAZARDOUS WASTE	QUANTITIES
ISDD VILLEPARISS (SITA)	Reform: 41,253
ISDND BOUQUEVAL (REP)	68,883
ISDND CLAYE-SOUILLY (REP)	96,514
ISDI CLAYE-SOUILLY (REP)	6,459
ISDI (PRIVATE BO CONTRACTS)	15,000
OTHER ISDNDs (PRIVATE CONTRACTS)	84,692

EXPENDITURE AND INCOME 2013

TERMS OF OPERATION OF THE DISPOSAL SERVICE AWARDED TO SYCTOM, THE METROPOLITAN AGENCY FOR HOUSEHOLD WASTE	PUBLIC CONTRACTS
Annual amount of expenditure for processing waste by Sycotom (total real expenditure section of operation 2013 administrative account - excluding provisions)	€279.0M
Terms and conditions for financing the general processing service	Contribution from local authorities, Eco-Emballage aid for selective collection and other eco-organisations, selling products
Terms and conditions for setting the special fee for the disposal of assimilated products	non applicable
Annual total of main contracted and paid services	€169.6M INCL. TAX
Overall cost per tonne of waste picked up from the bulky object disposal service (processing or landfill) and including transport and landfill of sorting rejects	€109/t
Overall cost of processing selective collections	€252/t
Overall cost of incineration with energy recovery	€86/t
Cost of landfill	€101/t
Income from access rights to processing and landfill centres at which the local authority is the project owner for assimilated waste	non applicable
Reversal for the selective collection	Sycotom support and Bareme E returns (excluding glass) €25.3M Returns associated with glass €3.1M
Itemised amount of aid received from certified bodies	Eco-Emballages €25.4M Ecofolio €4.6M OCAD3E €0.1M Éco-mobilier €1.1M

RECOVERY

ENERGY AND MATERIALS RECOVERY



ENERGY AND MATERIALS FROM INCINERATION	
Electricity (in MWh)	146,469
Steam (in MWh)	2,765,176
Clinkers (in tonnes)	336,401
Ferrous (in tonnes)	35,018
Non-ferrous (in tonnes)	2,638



RECYCLING MULTI-MATERIALS (in tonnes)	
Plastics, paper, cardboard, steel and aluminium, small electrical appliances	119,448



RECYCLING BULKY OBJECTS (in tonnes)	
Wood, scrap metal, cardboard boxes	92,875



WASTE RECEPTION CENTRES (in tonnes)	
	8,628

LANDFILL



LANDFILL (in tonnes)	
	253,610

INCOME

FROM MATERIALS RECOVERY
in €M (excl. tax)

FROM SELECTIVE COLLECTION AND BULKY OBJECTS SORTING	
Newspapers/magazines	4.4
Plastic packaging	2.8
Cardboard and EMR	3.5
Paper mix	0.8
Steel	0.4
Scrap metal from BO	0.4
Non-ferrous BO	0.0
Glass	2.4
Wood	0.0
TOTAL	14.7



FROM INCINERATION	
Scrap metal	2.5
Aluminium from incineration	2.0
TOTAL	4.5
TOTAL	19.2

INCOME FROM ENERGY RECOVERY
in €M (excl. tax)

FROM INCINERATION	
Sale of steam and electricity (Isséane and Ivry-Paris XIII)	32.4
Sale of steam and electricity (Saint-Ouen)	19.0
TOTAL	51.4

MEASURES TAKEN DURING THE YEAR TO PREVENT OR REDUCE HARMFUL EFFECTS ON HUMAN HEALTH AND THE ENVIRONMENT

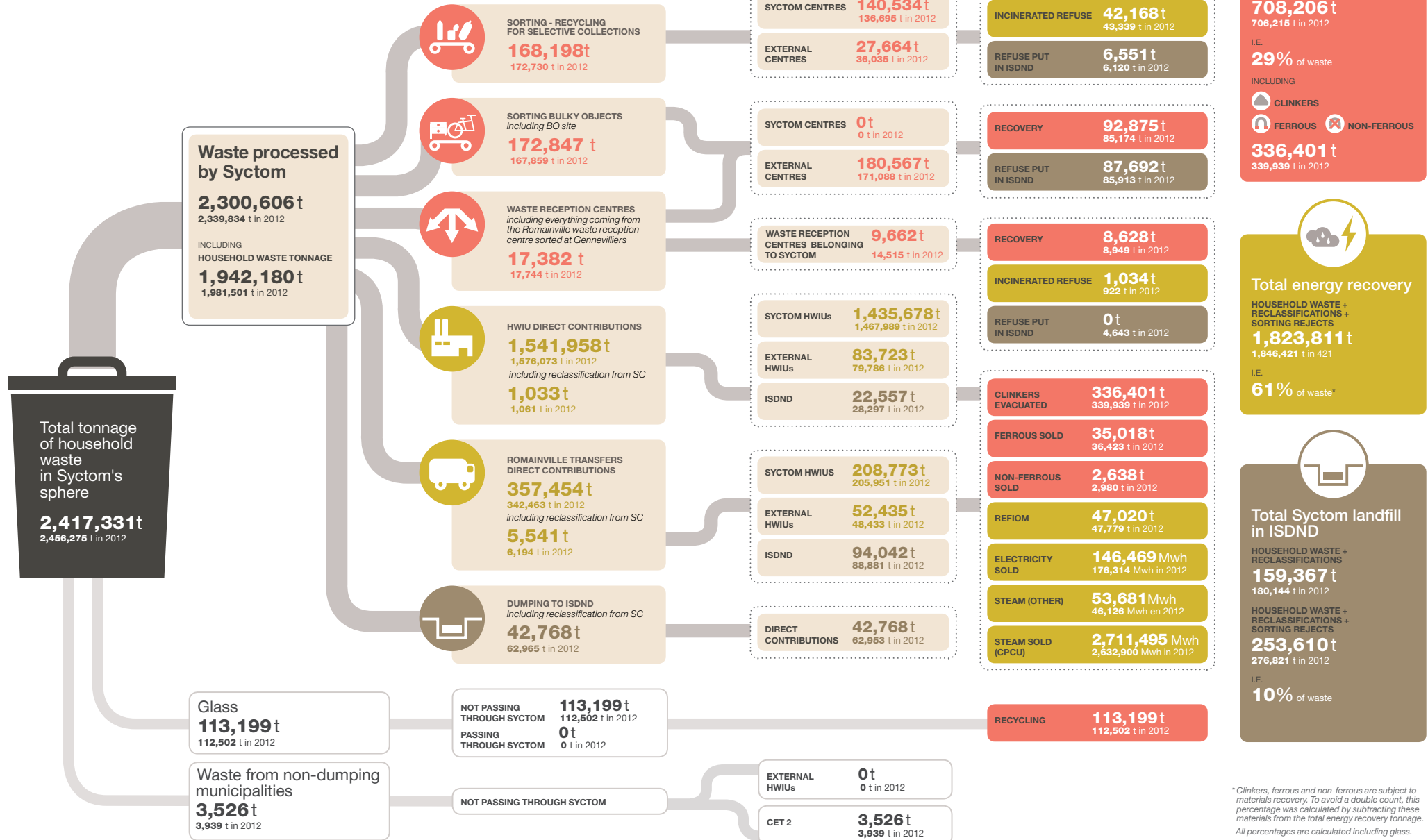
Continuous improvement and security on Sycotom sites

- An open call for tender was put out for fire safety diagnostics and systems and safety assignments throughout all Sycotom's sites. The work done on the installations over a period of time and the continual development of regulations require performing regular diagnostics regarding the installations' adherence to current regulations.
- An open call for tender was put out regarding small scale civil engineering work, as part of Sycotom's efforts to ensure its installations meet current safety standards, to oversee third parties' presence on Sycotom sites (especially the central vacuum unit for pneumatic collections at Isséane and Saint-Ouen) and to optimise current processes.
- An open call for tender was put out for the detection, conditioning and identification of sources of radioactivity in waste that enters Sycotom centres. The specialist company we engage will be assigned the task of intervening when radioactivity is detected to isolate and identify the radioactive element and to condition its source.
- An open call for tender was put out for improvement works on our electricity network and distributed control system on all Sycotom sites.

Control of atmospheric emissions

We contributed to financing an Airparif study as part of research into the levels of metals in districts surrounding Parisian industrial sites, and specifically the levels of particles and metals related to the Ivry/Paris XIII site.

Breakdown of tonnage in different processing centres in 2013



Processing costs

SELECTIVE COLLECTIONS

TONNAGES PROCESSED: **168,198 t** 172,730 t in 2012

EXPENDITURE	Operating costs	Depreciations and financial fees	TOTAL COST OF PROCESSING
	€38,382,476	€36,352,237	€7,489,924
		€7,481,486	€45,872,400
INVESTMENT	Syctom materials investment	Syctom eco-organisations support	TOTAL INVESTMENT
	€11,337,035	€12,015,323	€15,890,351
		€15,510,995	€27,227,386
NET PROCESSING COSTS*			€18,645,014
			€16,307,405 in 2012

POLICY OF SUPPORT AND RETURNS

EXPENDITURE	Syctom support and returns for local authorities	€28,430,232	€28,816,657
INVESTMENT	Eco-Emballages investment and glass investment received by Syctom on behalf of its member local authorities (Euro for Euro return)	€4,659,628	€4,615,016

COST OF POLICY OF SUPPORT	€23,770,604	€24,201,641 in 2012
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BUDGETARY COST

EXPENDITURE	Processing costs + support and returns	€74,302,632	€72,650,380
INVESTMENT	Syctom's investment + investment received on behalf of local authorities	€31,887,014	€32,141,334

SUM TO BE FINANCED VIA LOCAL AUTHORITY CONTRIBUTIONS	€42,415,618	€40,509,046 in 2012
Net processing cost + policy of support		

The net processing cost for selective collections went from €94.41/t in 2012 to €110.85/t in 2013, which is an increase of €16/t. This change can largely be explained by the fall in income from material recovery and the fall in tonnages entering selective collections, while expenses increased due to inflation and

increases in certain markets. Although incoming tonnages are falling, material recovery remains relatively stable. The net budgetary cost of selective collections including support for local authorities followed the same trend.

* The net cost of processing corresponds to the sum invoiced by Syctom to local authorities for processing their waste.

111
€/t
€94/t in 2012

141
€/t
€140/t in 2012

252
€/t
€235/t in 2012

INCINERATION WITH ENERGY RECOVERY

TONNAGES PROCESSED: **1,823,811 t** 1,846,421 t in 2012

EXPENDITURE	Operating costs	Depreciations and financial fees	TOTAL COST OF PROCESSING
	€155,554,779	€149,788,415	€67,491,431
		€68,787,209	€223,046,210
INVESTMENT	Syctom materials investment	Support for eco-organisations from Syctom	TOTAL INVESTMENTS
	€4,083,962	€12,534,592	€49,783,691
	€5,214,849	€12,983,293	€50,842,769
NET PROCESSING COSTS*			€156,643,965
			€149,534,713 in 2012

The 6% increase in costs per tonne can be explained by a decrease in tonnages incinerated at Saint-Ouen, which was not offset by an increase in the tonnage incinerated at 2 other Syctom incineration units. The considerable fixed charges of the installations are paid off by a decreased amount of tonnage and are therefore more of a financial burden. Operating costs increased by 4% under inflation, increases in the TGAP tax and low water fees, and the growing cost of processing clinkers. At the same time,

tonnages decreased by 1%. Total income (energy recovery, material recovery and support from eco-organisations) is down 4% due to a reduced tonnage incinerated at Saint-Ouen, work on the group's turbo generator at Ivry, and the decreased prices for recovering ferrous and non-ferrous extracts from clinkers.

86
€/t
€81/t in 2012

BULKY OBJECTS

TONNAGES PROCESSED: **172,847 t** 167,859 t in 2012

NET PROCESSING COSTS*	€18,840,864	€17,810,959 in 2012
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This increase in processing costs can be explained by the combined effect of inflation and a very significant decrease in income from bulky objects, which is largely due to the fall in wood recovery prices.

109
€/t
€104/t in 2012

LANDFILL

TONNAGES PROCESSED: **159,367 t** 180,144 t in 2012

EXPENDITURE	Operating costs (including transfer)	€16,697,064	€18,315,844
NET PROCESSING COSTS*			€16,697,064
			€18,315,844 in 2012

This 3% increase is mainly linked to inflation.

101
€/t
€98/t in 2012

Bulky objects

CATCHMENT AREAS AS OF 1st APRIL 2014

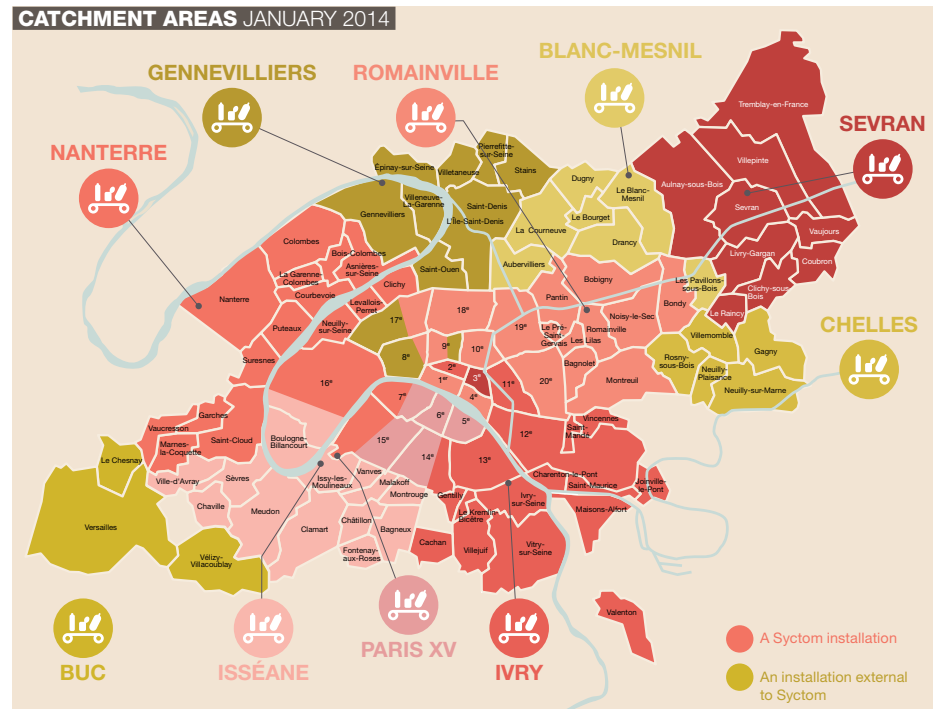


BREAKDOWN OF TONNAGES 2013

SORTING CENTRES FOR BULKY OBJECTS	TONNAGES RECEIVED	TONNAGES RECOVERED	OPERATORS	TONNAGES RECEIVED	TONNAGES RECOVERED	OPERATORS
BUC/CHÂTILLON	17,311	9,786	Nicollin/Véolia	1,075		REP
LA COURNEUVE	15,988	8,069	PAPREC	971		REP
GENNEVILLIERS SITA	33,507	17,055	SITA	1,252		REP
GENNEVILLIERS	26,916	14,330	PAPREC	1,683	3,123*	CEMEX
IVRY	5,765		Derichebourg	1,512		REP
IVRY DERICHEBOURG	5,692		CDIF	2,511		REP
	22,652	18,675*	DRT	2,823		REP
NOISY DRT	20,004		CDIF			
PIERREFITTE	12,130		CDIF			
IVRY	38,751	20,465*	SOFRAT			
	38,751		PAPREC			
VILLENEUVE-LE-ROI	279		PAPREC			
TOTAL				179,820	92,239	
SORTING WORKSITE BULKY OBJECTS						
GENNEVILLIERS	116	93	PAPREC			
IVRY	632	543	CEMEX			
TOTAL				747	636	
TOTAL				180,567	92,875	

* Recovered tonnages come from bulky objects as direct contributions and as transfers from other sites

Selective collections



BREAKDOWN OF TONNAGES 2013

SORTING CENTRES	TONNAGES		Variations in stock upstream downstream		TONNAGES RECOVERED	OPERATORS
	RECEIVED (including reclassifications)	SORTED				
IVRY-PARIS XIII	28,568	28,298	0	50	18,657	SITA
ISSÉANE	22,556	22,546	0	0	17,152	TSI
NANTERRE	32,819	32,108	0	-700	23,438	Véolia Propreté
PARIS XV	16,019	15,967	10	100	12,392	COVED
ROMAINVILLE	35,355	29,814	0	0	18,140	Urbaser environnement
SEVRAN	11,800	11,771	20	30	8,640	Véolia Propreté
BLANC-MESNIL	3,281	3,281	0	0	2,349	PAPREC
BUC	4,359	4,359	0	0	3,506	NICOLLIN
CHELLES	5,385	5,328	0	0	3,864	GÉNÉRIS
GENNEVILLIERS	8,361	8,360	0	0	6,706	SITA
GENNEVILLIERS / LE BLANC-MESNIL	6,334	6,325	0	0	4,603	SITA
TOTAL	174,846	168,168	30	-520	119,448	

RECYCLABLE MATERIALS RECOVERY CHANNELS

In tonnes

	SYCTOM TONNAGES 2013	DESTINATION	FUTURE	TRANSPORT
NEWSPAPERS MAGAZINES	52,432	Paper factories UPM-Chapelle Darblay at Grand-Couronne 76	NEWSPAPER	River (barge or container)
EMR (brown cardboard + thin cardboard packaging)	35,642	Papeteries Europac 76 Saica 02 Emin Leydier 10	BROWN CARDBOARD	40% of river transport (barge), the rest by road
PAPER MIX	17,705	Various paper factories in France and Europe	CARDBOARD, TISSUES, KITCHEN PAPER, TOILET PAPER	Road
LIGHT FOOD PACKAGING	1,177	Papeterie Georgia Pacific 45 Nova Tissue 88	TOILET PAPER AND DOMESTIC PAPER	Road
PLASTIC PET BOTTLES	6,612	FPR Limay factory 78	GRANULES USED TO MAKE BOTTLES	River transport (barge) after grouping of flows at Gennevilliers
PLASTIC HDPE BOTTLES	3,019	Neufchâteau factories 88 Lunen D	HDPE PRODUCTS (cleaning pipes, watering cans, etc.)	Road
PLASTIC POTS AND CONTAINERS (Sevrans trial)	95	Additional sorting at the PAPREC at Blanc-Mesnil then recycling in France according to the resins	IN DEVELOPMENT	Road
LDPE FILMS AND COVERS	158	Régefilm factory 64	PLASTIC BAGS AND BINS	Road
ALUMINIUM FROM SELECTIVE COLLECTIONS	207	Regeal-Affimet factory at Compiègne 60	ALUMINIUM USED TO CAST VARIOUS PARTS (particularly in the car sector)	Road
ALUMINIUM FROM CLINKERS	2,949	GALLOO factory at Halluin Belgium	ALUMINIUM USED TO CAST VARIOUS PARTS (particularly in the car sector)	Road
STEEL FROM SELECTIVE COLLECTIONS	2,505	Arcelor factory at Dunkirk 59	STEEL PRODUCTS	Road
STEEL FROM CLINKERS	35,018	Large scrap metal recovered by GALLOO IDF at Bonneuil s/ Marne 94 Small scrap metal: recovered by GALLOO Metal or other sub- contractors Belgium and 59	STEEL PRODUCTS	Road + increase in power of river transport between Bonneuil and Halluin (large scrap metal)

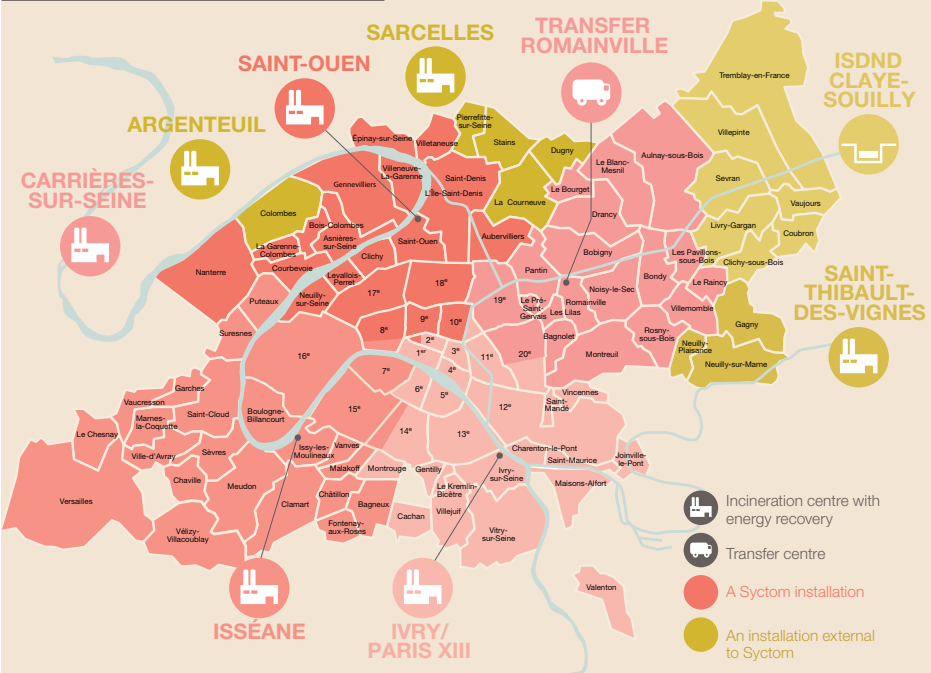
WASTE RECEPTION CENTRES

WASTE RECEPTION CENTRES	TONNAGES RECEIVED	TONNAGES RECOVERED	OPERATORS
IVRY-PARIS XIII	5,995	4,961	SITA
ROMAINVILLE	11,387	3,667*	Urbaser environnement
TOTAL	17,382	8,628	

* Everything from the Romainville waste reception centre is then sorted in a BO centre. Recovered tonnages from sorting are not accounted for here.

Residual household waste

CATCHMENT AREAS JANUARY 2014



BREAKDOWN OF TONNAGES 2013

INCINERATION UNITS	TONNAGES INCINERATED	RECOVERY					OPERATORS
		Steam sold (N MW-h)	Electricity sold (N MW-h)	Clinkers (N TONNES)	Ferrous (N TONNES)	Non-ferrous (N TONNES)	
ISSÉANE	459,825	562,855	59,767	84,240	6,782	841	TSI
IVRY-PARIS XIII	685,787	1,054,724	43,177	120,352	13,185	654	IP13
SAINT-OUEN	541,404	1,093,916	5,663	103,079	11,939	966	TIRU
ARGENTEUIL*	37,152	1,592	14,371	8,997	649	50	Novergie
CARRIÈRES-SUR-SEINE*	17,617	10,018	1,306	3,633	628	15	Novergie
ST-THIBAUT-DES-VIGNES*	42,329	0	16,122	9,073	949	71	Novergie
SARCELLES*	40,783	42,071	6,063	7,027	885	41	SAREN (Véolia)
TOTAL	1,824,896**	2,765,176	146,469	336,401	35,018	2,638	

* For external HWIUs, the tonnage given corresponds with the tonnage incinerated on Syctom's behalf.
** This tonnage includes actually incinerated waste, excluding variations in Syctom's HWIUs' tank level.

Control of atmospheric emissions
in the incineration centres with energy recovery by SYCTOM

	TYPE OF WASTE Concentrations in mg/Nm³ to 11% of O₂								
	Particles	Hydrochloric acid	Hydrofluoric acid	Sulphur dioxide	Nitrogen oxide	Cadmium + thallium	Mercury	Antimony + arsenic + lead + chrome + cobalt + copper + manganese + nickel + vanadium	Dioxins and furans (in ng/Nm³)
MAXIMUM EMISSION VALUES APPLICABLE SINCE 28/12/2005 Ministerial order of 20/09/2002	10	10	1	50	200 (80)*	0.05	0.05	0.50	0.10
IVRY-PARIS XIII									
FEBRUARY AND APRIL	4.2	0.9	0.07	24	61	0.003	0.002	0.04	0.051
MAY (Syctom)	3.6	0.5	0.09	26	70	0.006	0.002	0.08	0.007
JULY AND DECEMBER	1.4	1.4	0.16	6	56	0.004	0.004	0.07	0.012
OCTOBER (Syctom)	3.0	0.7	0.13	13	63	0.004	0.003	0.05	0.005
SAINT-OUEN									
MARCH	1.1	1.0	0.1	10	53	0.001	0.002	0.04	0.008
APRIL (Syctom)	1.0	1.1	0.1	10	54	0.004	0.006	0.06	0.010
JULY	2.3	0.8	0.1	24	65	0.002	0.003	0.13	0.007
OCTOBER (Syctom)	1.9	1.0	0.1	7	71	0.004	0.010	0.04	0.107**
ISSÉANE									
MARCH	4.5	2.3	0.1	1.9	27	0.0007	0.001	0.02	0.004
APRIL	1.4	1.9	0.16	1.5	25	0.0007	0.003	0.07	0.004
JUNE (Syctom)	0.1	3.8	0.05	2.0	21	0.002	0.006	0.01	0.003
JULY	0.4	2.5	0.06	1.4	31	0.0008	0.001	0.02	0.007
OCTOBER	0.4	4.8	0.03	1.5	62	0.0003	0.0005	0.04	0.004
DECEMBER (Syctom)	0.3	2.4	0.05	0.8	19	0.003	0.053	0.06	0.003

* The Paris region plan for the protection of the atmosphere has set the maximum emission value at 80 mg/Nm³ (the threshold set by the European directive is 200 mg/Nm³). This threshold is repeated in the authorisation order to operate in Ivry-Paris XIII and Saint-Ouen. At Isséane, the authorisation order delivered by the Prefect of Hauts-de-Seine sets the threshold for emission of nitrogen oxides at 70mg/Nm³.

** The concentration of dioxins and furans measured during October's campaign was higher than the maximum emission value due to problems with the plate heat exchanger on the second line. The new measure was put in place in December once the exchanger had been replaced. The concentration measured then reached a lower level than the maximum emission value.

ng/Nm³: nanogram (a billionth of a gram) per square metre (quantity of gas in 1 m³ for normal temperature and pressure conditions).
mg/Nm³: milligram (a thousandth of a gram) per square metre.
The figures in the above table are inflated when the limit value for method quantification was used as the measurement value, for each parameter whose content was too low to be quantified.

Waste dumped in landfill installations
in tonnes

REFIOM SENT TO ISDDs	NON-HAZARDOUS WASTE SENT TO ISDNDs	
VILLEPARISIS (Syctom contract) from	BOUQUEVAL (Syctom contract)	
HWIU in Ivry-Paris XIII 17,817	Romainville waste reception centre rejects 0	
Isséane HWIU 11,478	HW from Ivry/Paris XIII HWIU 0	
HWIU in Saint-Ouen 11,958	HW from Saint-Ouen HWIU 0	
TOTAL ISDD 41,253	HW from Romainville Centre 68,883	
	TOTAL 68,883	
INERT WASTE SENT TO ISDIs	CLAYE-SOUILLY (SYCTOM contract)	
CLAYE-SOUILLY (Syctom contract)	HW from direct contributions 42,759	
Construction debris waste reception centre in Ivry/Paris XIII 3,456	HW from Romainville Centre 28,249	
Construction debris waste reception centre in Romainville 3,003	HW from Ivry/Paris XIII HWIU 10,909	
TOTAL 6,459	HW from Saint-Ouen HWIU 11,229	
	HW from Isséane HWIU 418	
Centre (excluding Syctom contract)	SC rejects and reclassifications from the sorting centre at Sevran 2,950	
BO private market construction debris 14,364	TOTAL 96,514	
BO worksite construction debris 636		
TOTAL 15,000		
TOTAL ISDI 21,459	TOTAL ISDND (Syctom contract) 165,397	

REFIOM: Residues from household waste incineration plants made up of particle removal residues and residues from the smoke scrubbing process.
ISDD: Landfill installation for hazardous waste
ISDI: Landfill installation for inert waste
ISDND: Landfill installation for non-hazardous waste

Centre (excluding Syctom contract)
SC sorting rejects private contracts to EPR 693
Sorting rejects from BO 83,999
TOTAL ISDND (excluding Syctom contract) 84,692
TOTAL ISDND 250,089

OVERALL TOTAL sent to landfill centre 312,801

These tonnages correspond to waste that is actually evacuated in landfill. They do not take stock variations into account.