



2005 activity report

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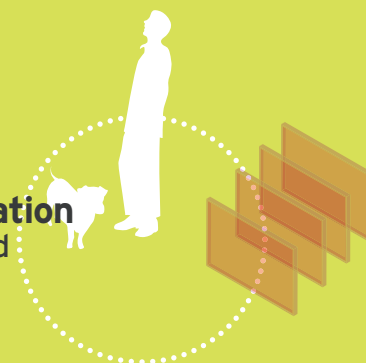
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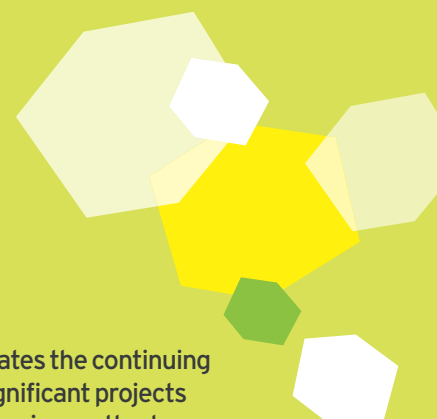
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"Our member communities' recent 40,000 tonne reduction in the amount of waste brought in can only be viewed as encouraging."

This 2005 activity report for SYCTOM demonstrates the continuing trends noted in recent years and the launch of significant projects concerned with the diversification of waste processing methods.

Firstly, we must acknowledge our member communities' contribution to the recent 40,000 tonne reduction in waste. Since 2001, there has been a constant reduction of 14 kg per year per resident. We must continue to encourage this trend and be motivated by it.

In 2005, this reduction enabled us to deal with the reduced availability of our energy recovery plants, which was caused by technical closures associated with the work required to bring the equipment up to the statutory standards. It also helped us to continue to reduce the need for storage in landfill sites.

Following a significant increase in selective collection, SYCTOM is preparing to move onto the next stage in its policy of diversifying waste processing methods. This stage effectively involves the opening of two methanization units in the Seine-Saint-Denis department.

At this scale, mechanical sorting of residual waste in order to separate the fermentable fractions and combustible fractions will make it possible both to improve materials recovery from waste and to produce clean energy.

This will be a remarkable innovation!

It also gives a new perspective to our thoughts for the future of the Ivry centre and the quantities of waste that are brought there. A veritable multi-process project could be created, halving the incineration capacities while at the same time supplying the urban heating systems in the sector with steam.

I would like to thank SYCTOM's elected representatives and services, who remain highly motivated as they lead our policy of voluntary and innovative waste management.

This group capacity to look ahead ensures the proper management of our investment programme and expenses, evidence of a high-quality public service.

François DAGNAUD,
Chairman of SYCTOM
of the Paris urban area



> Reference points

A syndicate serving over 5 million inhabitants

SYCTOM identity card

> Population catchment:
5.3 million residents, the equivalent of 9% of the French population, in 5 administrative departments: Paris, Seine-Saint-Denis, Hauts-de-Seine, Val-de-Marne, Yvelines;
> 2.48 million tonnes of household waste treated directly

by SYCTOM in 2005 (of the 2.67 million tonnes collected across the territory, including those municipalities not using SYCTOM facilities and glass, which does not go through SYCTOM);
> 19 local authorities and inter-municipal members representing 85 municipal councils.



> A production of waste above the French average

SYCTOM de l'Agglomération parisienne was created in 1984 with 60 member municipalities at that time. This number increased to 85 member municipalities in 2005.

SYCTOM serves 5.3 million residents, of whom almost eight out of ten live in high-rise housing. It treats household waste coming from the most densely- and highly-populated area in France (907 residents/sq km).

As a direct result of the high number of small shops and independent trades, the production of household waste together with waste from these small activities is higher than in the rest of France: 506 kg per inhabitant was generated in 2005, compared with the national average of 434kg*. This amounts to an annual production of 2.67 million tonnes of household waste. Moreover, the high proportion of one- and two-person households in Paris and its suburbs, together with the urban lifestyle and consumer habits, means that a larger volume of packaging and a smaller quantity of organic waste is generated here than in the rest of France.

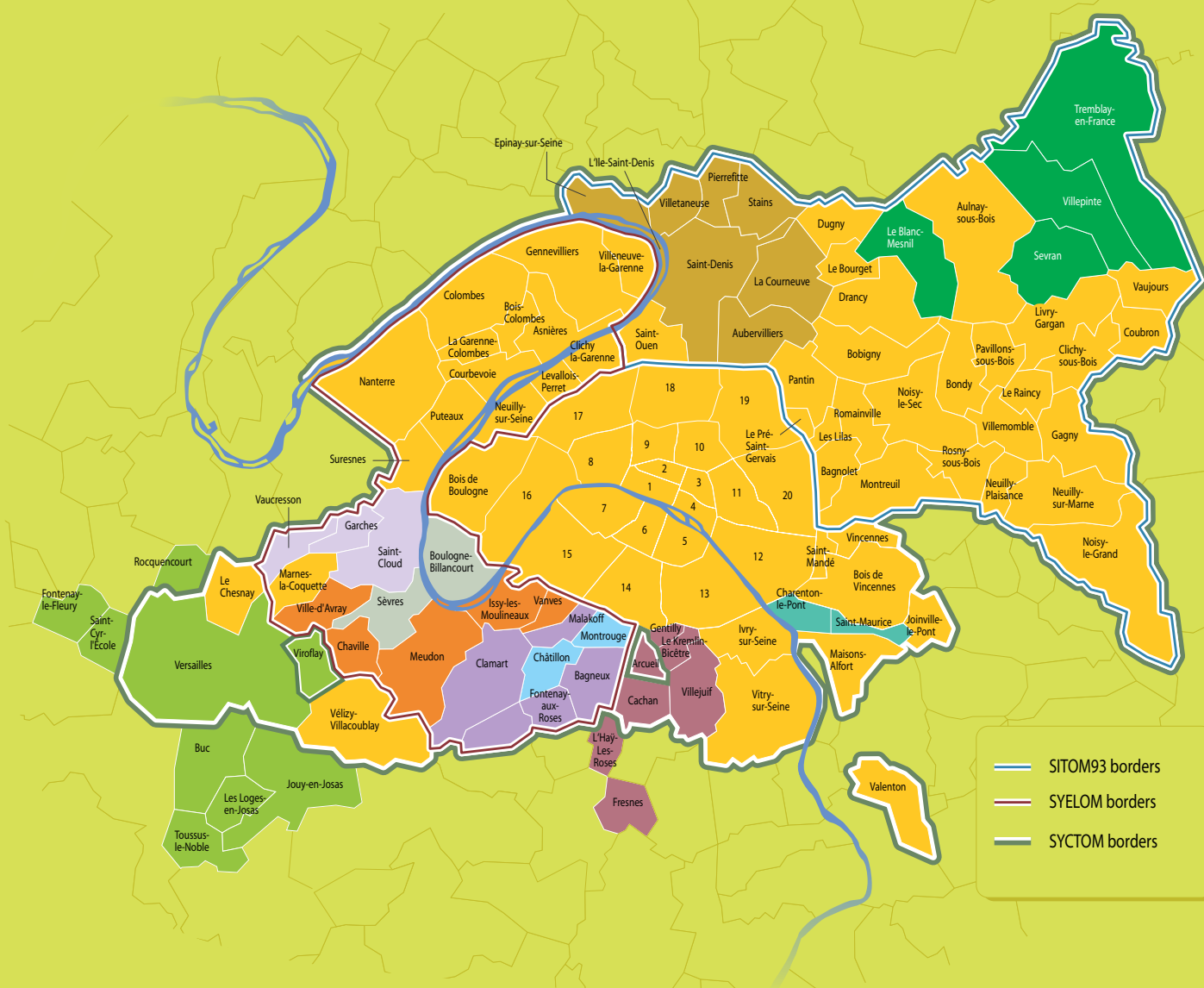
* Figures: Ademe 2002.

Direct members, primary syndicates and intermunicipalities

68 municipal councils are members of SYCTOM by way of two primary syndicates set up before SYCTOM came into being, SITOM93 and SYELOM:

> SITOM93 groups together 38 municipal councils from the Seine-Saint-Denis department, of which 26 are direct members and 12 are indirect members through the membership of two intermunicipal refuse collection authorities: the community of agglomeration of Plaine Commune and SEAPFA;
> SYELOM groups together 30 municipal councils from the Hauts-de-Seine department, including 14 direct members and 16 indirect members through the five intermunicipal refuse collection authorities; the communities of agglomeration Arc de Seine, Cœur de Seine, Sud de Seine, Val de Seine and the community of communes of Châtillon-Montrouge. Although the two primary syndicates confer their waste processing to SYCTOM, together with their members they also play a central role in information, coordination and aid with decisions and monitoring selective and specific waste collections (special and clinical waste, network of waste disposal sites etc.)

SYCTOM's area of operation



SYCTOM also has 17 direct member municipal councils including:

- > 10 municipal councils including Paris;
- > 7 through three intermunicipal refuse collection authorities: the community of communes of Grand Parc in the Yvelines department (for Versailles), the community of communes of Charenton-Saint-Maurice and the community of agglomeration Val de Bièvre* in the Val de Marne department.

Because they are in the middle of long term contracts for the processing of their waste, four member municipal councils of Seine-Saint-Denis, called "non-disposing" members, do not confer the processing of their waste to SYCTOM. These municipal councils are Dugny, La Courneuve, Pierrefitte and Stains. There are four other municipal councils in this same situation but with short-term contracts and they are being regularized. These municipal councils are Clichy-sous-Bois, Coubron, Neuilly-Plaisance and Noisy-le-Grand. A member municipal council of the Hauts-de-Seine department, Ville d'Avray, does not yet dispose of its waste using the selective collection method. In 2005, one municipal council, Vaujours, started disposing household waste and bulky items but in the long term they all intend to follow suit.

Municipal councils, intermunicipalities and primary syndicates forming the SYCTOM territory

- SEAPFA
- CA Plaine Commune
- CC Charenton-St-Maurice
- CA Sud de Seine
- CC Châtillon-Montrouge
- CA Arc de Seine
- CA Val de Seine
- CA Cœur de Seine
- CC Grand Parc
- CA Val de Bièvre*

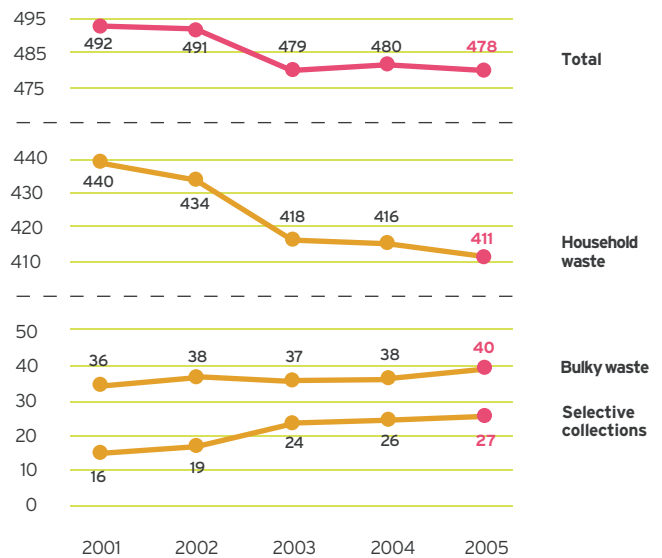


* This intermunicipality is a refuse collection authority since January 1st 2006.



A downward trend in quantities of waste treated by SYCTOM since 2001*

(en kg/res./year)



* constant growth over a constant perimeter consisting of 76 municipal councils and 5.05 million inhabitants.

> Five types of waste

The waste collected by SYCTOM's member municipal councils and intermunicipalities comes from five distinct sources:

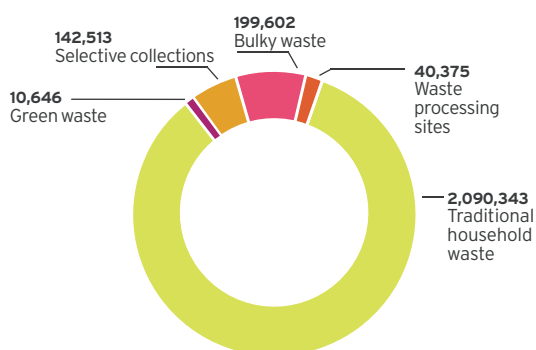
Traditional domestic waste collection

This concerns mixed non-recyclable waste (leftovers from meals, soiled waste etc), thrown in a bin by the user. This waste is channelled to incineration centres equipped with furnaces for energy production.

Bulky waste

This comes from the domestic activity of households and includes used furniture, mattresses, electrical appliances and so on. These large items cannot be taken by standard collection because of their weight and volume. This waste is sent to specialised sorting centres, where some of it is used as a source of materials for recovery, reuse and recycling. Breakdown of the different methods of collecting the 2.48 million tonnes treated by SYCTOM in 2005.

Breakdown of the different methods of collecting the 2.48 million tonnes treated by SYCTOM in 2005.



Selective collection

This concerns recyclable materials that the user has separated and thrown into specially designated bins: paper/magazines, cardboard packaging, plastic bottles, cartons for food liquids, steel and aluminium cans, glass bottles and jars. This kind of waste then goes to sorting centres where it is sorted by material and passed on to recycling operators for recovery and use of materials. Only glass does not go to SYCTOM centres (except for a marginal part of the source which is sent to the Nanterre centre).

Waste brought to the processing site







Waste brought to the processing site includes the bulky items, electrical appliances, special domestic waste (small batteries and large batteries, paints, solvents, used motor oil etc) and diverse waste (rubble, wood etc) not handled by household waste collections or selective collection owing to their weight, volume or toxicity. These are placed in separate containers and some are channelled for recycling and others incinerated or sent to special burial sites.

Green waste

This results from garden and open space upkeep and is made up of grass cuttings, leaves and branches and so on. They are collected by the municipal councils or taken straight to the processing sites.

SYCTOM waste processing sites in 2005



-  Sorting centres
-  Incineration centres equipped with fumaces for energy production
-  Transfer centres
-  Selective collection sorting centres under construction
-  Energy production unit under construction
-  Planned methanization units
-  Planned selective collection sorting centres

* This incineration centre with energy production stopped its activity in February 2006. It has been converted to a transfer centre, which will be in use until Isséane opens.



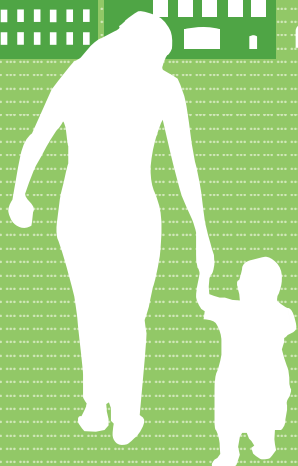
➤ **Strategy.** In 2005, SYCTOM continued the policy of sustainable environmental protection that it is pursuing on several fronts: extending capacities for sorting and materials recovery, prevention of waste, use of alternative transport and development of the methanization system.





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A course of sustainable environmental protection



Reduce all sources of pollution and nuisance



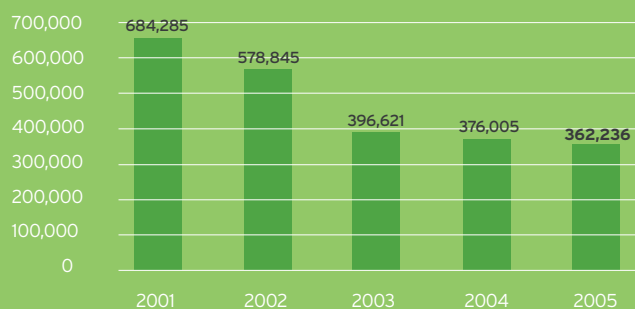
A priority: reducing the use of landfill sites

Due to its insufficient capacity for processing household waste and the constant increase in the volume of waste to be processed, SYCTOM was obliged to use landfill sites for almost 700,000 tonnes of waste in 2001. In order to preserve the environment and comply with the statutory obligations, the Syndicate set itself the objective of limiting the use of landfill sites to a minimum.

Thus, in four years the volume of waste being taken to technical landfill centres has been reduced to 360,000 tonnes, of which 200,000 is residual household waste and 160,000 tonnes of residual waste with no materials recovery possibilities. In order to meet this challenge, SYCTOM has simultaneously undertaken a series of actions:

- improvements in the quantity and quality of materials recovered from selective collections and bulky items;
- drafting and implementing a waste prevention plan in order to reduce the source of the quantity of waste requiring processing;
- increasing its processing capacities by creating new centres (a sorting centre in Nanterre opened in 2004, a sorting centre and energy production centre at Isséane, a sorting centre at Sevran and four in Paris including the first in the Paris XV arrondissement) and modernising existing plants;
- diversification of the processing methods by developing the methanization process for the compostable fraction of waste. The two projects for centres in the Seine-Saint-Denis department will make it possible to recycle the 215,000 tonnes of household waste which are currently being incinerated or buried in landfill sites (see p.13);
- recourse to private incineration centres to partly ease the lack of processing capacities and take charge 20,000 tonnes of waste per year.

Breakdown of waste tonnages buried in Class 2* landfill sites by SYCTOM since 2001



In 2005, 362,236 tonnes of waste were buried in landfill sites compared with 684,285 in 2001.

* This waste is made up of residual household waste, non-recovered bulky items and waste refused by the selective or compost collection sorting centres which are buried in Class 2 landfill centres.

“In four years, the tonnage of waste buried in landfill sites has been reduced by half.”





The incineration centre with energy production at Saint-Ouen was the object of modernisation works to the smoke processing system in 2005.

SYCTOM modernises its energy production centres

In order to provide sustainable environmental and public health protection, the Syndicate is continuously improving its installations. In conformity with the ministerial order of 20 September 2002, applicable to 28 December 2005, SYCTOM has modernised its smoke processing system and

intensified the monitoring of gas and water discharge at its incineration centres at Ivry-Paris XIII and Saint-Ouen. Due to this work, dioxin emissions are down by 90% and nitrogen oxide levels are below the limit set by the air pollution control plan for Ile-de-France (less than 60 mg/Nm³ instead of 80).

Prevention plan 2005-2010: first report is encouraging

To fight against the growing tonnages of waste to be treated, in 2004, with the support and mobilisation of its member municipal councils the Syndicate undertook a waste prevention plan aimed at reducing waste for incineration and landfill disposal by 300,000 tonnes a year over the next five years.

- 120,000t by methanization;
- 65,000t by an increase in selective collections;
- 35,000t by increase in materials recovery from bulky items
- 15,000t by an increase in materials recovery from waste collection centres;
- 65,000t by a waste prevention policy

In order to achieve these objectives, the plan is constructed around two points: on the one hand, the improvement of materials recovery from waste and the diversification of processing methods and on the other, modifying the behaviour of all those playing a part (residents, administrative services, businesses) in the consumption of natural resources and preservation of the environment. The prevention plan has been in place for a year now and reports of the first actions to be implemented are encouraging.

Increased materials recovery

The generalisation of selective collection in member municipalities and its development, with financial backing by the SYCTOM, are starting to show results: selective collections have shown an increase of 65%* since 2001. From 16 kg/res./year, this ratio has now reached 27 kg. It is to be emphasised that selective collections of cardboard and office paper generated by businesses are increasing and a growing quantity is treated in the SYCTOM sorting centres. These new measures are playing a part in the development of recycling by reducing the proportion of incineration requirements. The tonnage of bulky items, however, has increased by 9%. This increase is explained by

the increase in the collection of illegal tipping, which is mainly the result of professional activities.

Furthermore, the number of waste collection centres created on SYCTOM territory continues to increase. Six new installations were opened between 2004 and 2006, at Gennevilliers, Pierrefitte-sur-Seine, Rosny-sous-Bois, Sevran, Tremblay-en-France and Villepinte, which will make it possible to increase the tonnages of waste received and their materials recovery. These were granted a subsidy from SYCTOM for an amount totalling €191,943 to which is added the subsidy of the same amount from the Ile-de-France region as part of the "Terres Vives" contract.

Specific operations to raise awareness

In order to reduce waste at source through example and education, SYCTOM encourages initiatives by member local authorities encouraging the use of reusable shopping bags as substitutes for plastic carrier bags, with an incentive of €0.20 per reusable bag. Thus, in 2005 the Syndicate paid around €45,000 in grants to the municipal councils of Gennevilliers, Saint-Mandé, Bagnolet, Nanterre and Paris for the free distribution to their inhabitants of 224,000 reusable shopping bags. In order to reduce the tonnages of advertising and publicity leaflets to be processed, the Syndicate made "Stop Pub" stickers and distributed them to the residents of its member communities: 1.5 million cards in total.

In order to improve the collection and recovery of materials from old clothes, SYCTOM encourages its members to set up voluntary drop-off points and takes charge of the processing of part of this waste in its centres. In return, the associations undertake to recover at least 50% of the textiles collected and the companies 80%. In March 2006, agreements were signed between SYCTOM and textile recycling companies Le Relais and Ecotextile.

* Trend established over a constant perimeter (76 participating municipal councils and 5.05 million residents).

A move towards transparency and dialogue

In 2005 SYCTOM continued and intensified its move for dialogue and informing the public about its processing centres, its projects and the waste problem. Several open days were held at Nanterre, Ivry-Paris XIII and Saint-Ouen that enabled the residents to discover for themselves how the installations work, and almost 2,000 visitors - 30% of whom were schoolchildren - were welcomed to the centres throughout the year.

Over and above the annual meetings of the local information and surveillance commissions presided over by the Prefectures, SYCTOM also associates the elected members of the host municipalities, the inhabitants and the associations within the committees monitoring the environmental quality charters in order to enable monitoring of the worksites and the subsequent operating of its new centres.

The SYCTOM magazine, distributed throughout all the member municipalities, giving regular information about the current news of the Syndicate and of waste management. There is also the SYCTOM website (www.syctom-paris.fr), with a new section about waste prevention and a space for local authorities to exchange experiences, and the Isséane website (www.syctom-isseane.com). In 2005, these websites received over 142,000 visits.



Over 700 schoolchildren visited the SYCTOM centres in 2005.



Transport by inland waterways: a priority

Energy saving, reduced emission of exhaust gases and nuisance caused by noise, lowering problems of crowding and accident risks: because alternatives to road transport contribute to environmental protection, for the last ten years SYCTOM has been giving preference to the recourse to transport by waterway or rail to manage the flow of waste tonnages of materials coming from its various centres.

17,000 trucks avoided in 2005

In 2005, 37% of materials coming out of the various processing centres (around 365,000 tonnes of materials compared with 320,000 tonnes in 2004) were transported by rail and by waterway to their various places for materials recovery, thus avoiding the traffic of 17,000 trucks on the roads of Ile-de-France. SYCTOM is aiming for a rate of 51% in 2007, going up to 63% in 2010.

- For several years, clinker (solid residues from incineration of household waste) from the energy production centres at Ivry-Paris XIII and Saint-Ouen, totalling 279,000 tonnes per year, has been sent by waterway and by rail to the processing centres at Lagny-sur-Marne and Saint-Ouen-l'Aumône, thus avoiding the traffic of over 11,600 trucks each year.
- Since January 2005, newspapers/magazines from selective sorting centres at Nanterre and Gennevilliers, totalling 16,000 tonnes per year, have been sent by waterway to a paper recycler at Grand-Couronne near Rouen. 700 trucks have been thus avoided each year.
- Also since January 2005, 66% of bulky items received at the sorting centre at Saint-Denis, totalling 42,000 tonnes per year, have been taken by barge to a more specialised sorting centre for bulky items at Bonneuil-sur-Marne, thus avoiding 2,000 trucks a year.
- Since the start of 2005, rubble from the waste sites of Ivry-

Paris XIII, Saint-Denis and the private sorting centre at Bonneuil-sur-Marne, totalling 17,800 tonnes, are now being transported via the inland waterways.

- On the construction site of the future centre at Isséane, 560,000 cu m soil from the earthworks were taken away via the Seine between August 2004 and June 2005, thus avoiding the circulation of 56,000 trucks over a period of eleven months. Inland waterways are also used for the transport of the processing plants to be installed in the centre.
- Moreover, as soon as Isséane comes into service in 2007, the evacuation of 110,000 tonnes of clinker each year will be carried out by river to its destination at Claye-Souilly, thus avoiding road traffic of 4,600 trucks every year.
- A much larger project for the transport of paper between Ile-de-France and Grand-Couronne is being studied by ten partners, including SYCTOM. It is planning the transport by barge of 75,000 tonnes per year of papers/ magazines from Paris and its suburbs (including around 54,000 tonnes per year coming from SYCTOM sites) to a paper mill near Rouen; on return an equivalent tonnage of bobbins of recycled paper will be brought back by inland waterways to supply the printers in Ile-de-France. 450,000 km of road transport will have been thus avoided each year.
- Other projects favouring transport via inland waterways are currently being studied: the evacuation of around 30,000 tonnes of scrap metal by barge from SYCTOM energy production centres (Saint-Ouen, Isséane and Ivry-Paris XIII) to a processing centre at Bonneuil-sur-Marne, followed by transport by waterway of clinker extracted from scrap metal to the clinker processing platform situated at Isles-les-Meldeuses (77).
- There are also plans to use the inland waterways to transport cardboard packaging made into balls in the SYCTOM sorting centres (Ivry, Romainville, Isséane, Paris XV and Nanterre) to the company Papeterie de la Seine at Nanterre.

High environmental quality in practice

The concept of high environmental quality (HEQ) is an integral part of the Syndicate's sustainable development policy. It is applied to all SYCTOM's new constructions and set out formally in a charter signed with the host municipal council. It involves a "reasoned" choice of construction processes and products, "rational" use of energy, information provision for neighbouring residents,

improvement of working conditions and a social integration scheme. Four environmental quality charters have been signed (Nanterre, Issy-les-Moulineaux, Saint-Ouen, Ivry) and two more are soon to be signed (Sevran and Paris XV). A monitoring committee allows regular dialogue to be maintained between the representatives of the host town, SYCTOM, the operator of the centre and the primary syndicates.



Solar panels installed on the roof of the sorting centre at Nanterre provide for half the needs for domestic hot water.



> Our projects

Two methanization units in Seine-Saint-Denis

In order to reduce waste incineration and burial in landfill sites and encourage materials recovery, SYCTOM is preparing the construction of a first methanization unit at the Romainville site that until now has been used solely for selective collection sorting and sorting bulky waste and for the transfer of more than 330,000 tonnes of household waste per year to incineration centres and landfill sites.

Methanization is a process that decomposes compostable waste,

producing biogas, which is transformed on site into electricity, heat or biofuel. This process helps to participate in the reduction of greenhouse gases and the preservation of fossil fuel reserves.

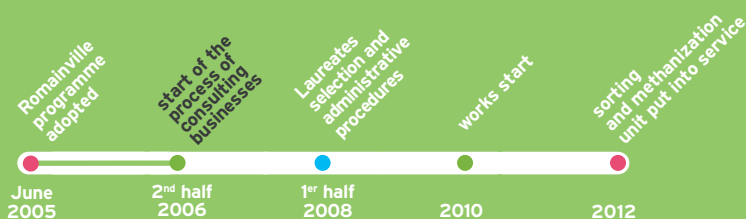
In practical terms, due to a new chain of specific selective sorting, the compostable fraction of household waste (food leftovers, paper, cardboard, non-synthetic textiles) and non-acceptable waste from selective collection sorting will be selected prior to being methanized.

The decomposing process is carried out in digesters without resulting in any nuisance.

The methanization unit at Romainville will be able to process 150,000 tonnes of compostable waste and produce 35,000 tonnes of biogas per year.

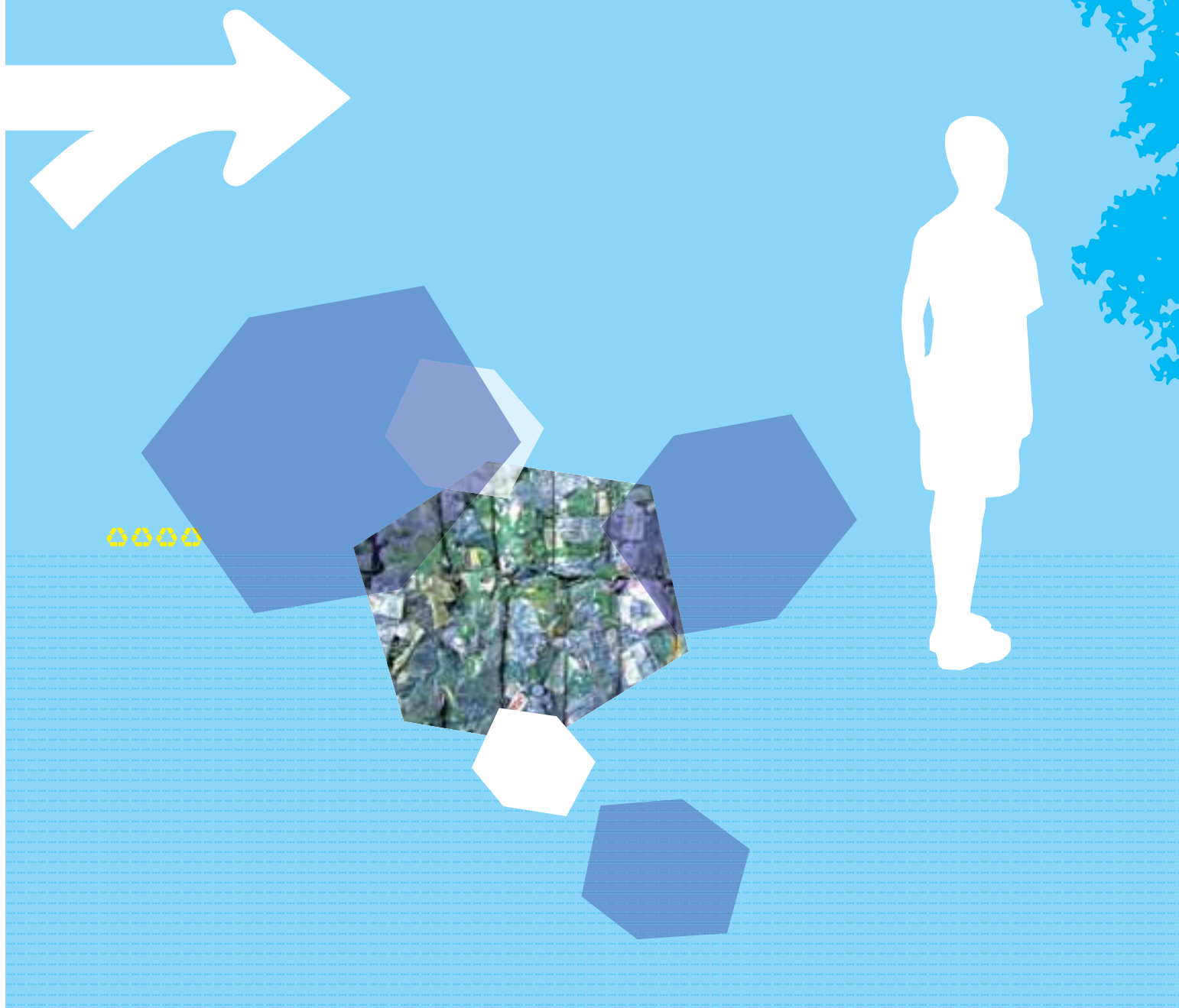
SYCTOM already plans to install a second centre with an annual capacity of 80,000 tonnes (compostable waste and sludges) in the Seine-Saint-Denis department, on the territory of the Blanc-Mesnil municipal council.

Calendar of the project at Romainville



› **Activities.** Sorting, incineration... SYCTOM de l'Agglomération parisienne uses several processing methods for materials recovery from the 2.5 million tonnes of waste produced each year by the residents of its member communities.

These activities make it possible to recuperate material for recycling and energy for urban heating.



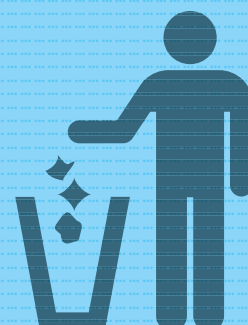
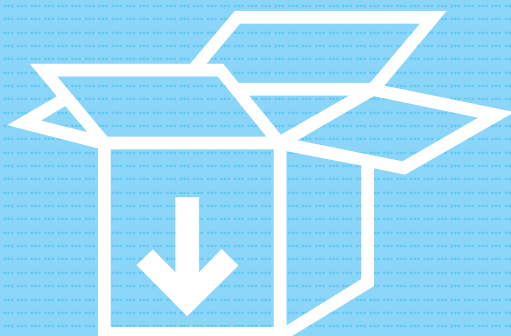
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A public service mission: processing waste

Sorting and recycling <

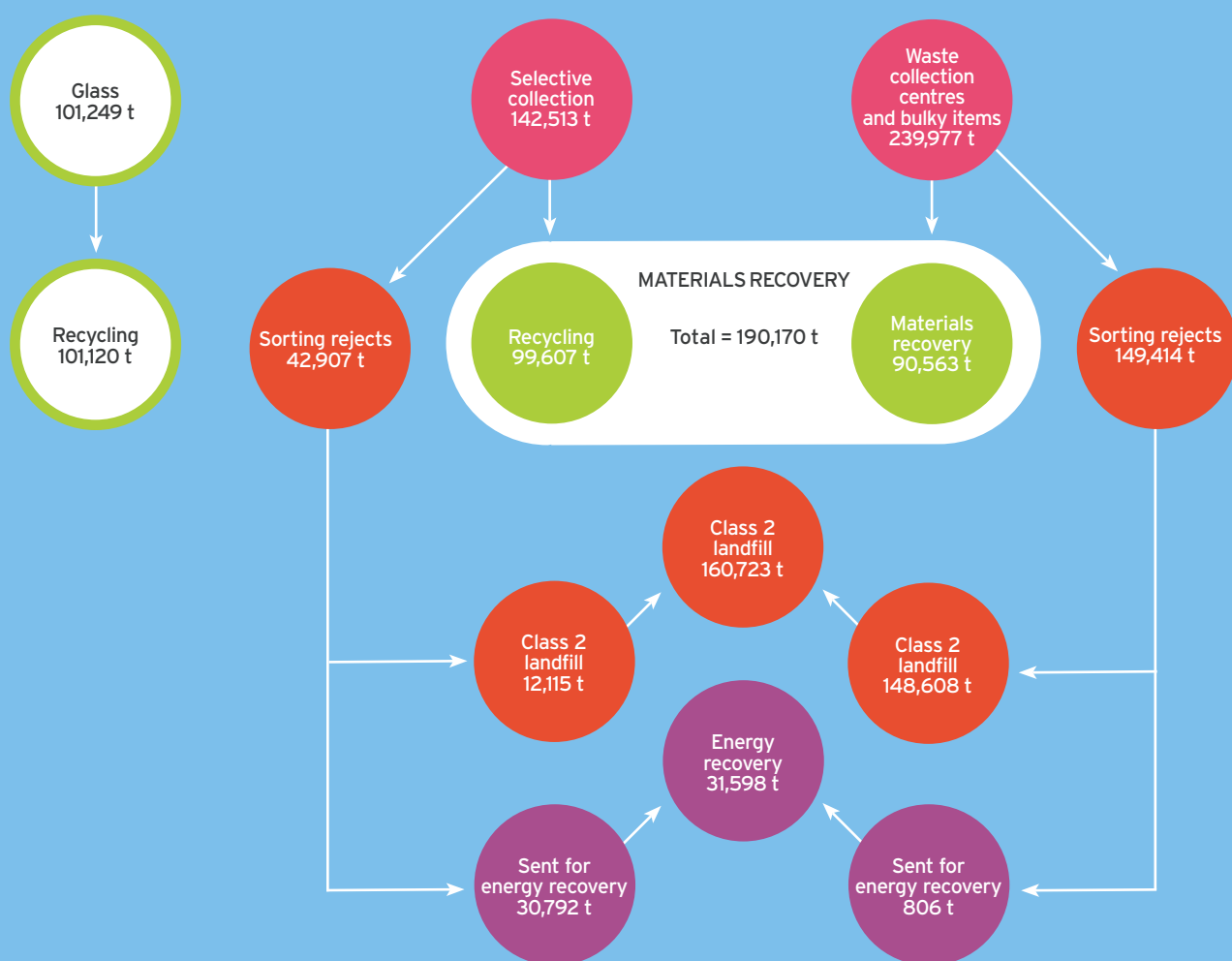
Energy recovery <

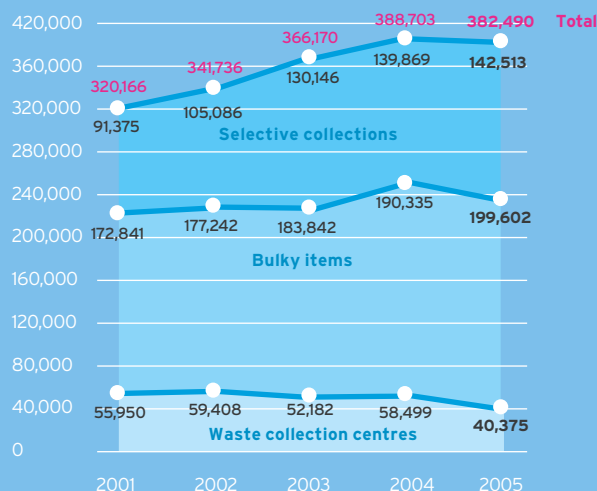
Storage in landfill sites <



> Sorting and recycling

A second life for waste



A strong growth in selective collections
Cumulative curves

Materials recovery on the increase

Recycling or materials recovery is used to designate the reuse of waste sorted by the inhabitants in order to produce new products. Thus with newspapers/ magazines, paper mills make paper for newspapers, (which can be made with up to 100% recycled paper), plastic bottles are transformed into textile fibres for clothing, glass packaging in collection bins is made back into glass and so on. To ensure the development of this industry, two points are of prime importance - the generalisation of selective collections and the extension of the network of waste collection sites.

Three types of waste are sent for materials recovery

• **Waste resulting from selective collection** (cardboard packaging, food cartons, plastic bottles, steel and aluminium cans and newspapers and magazines).

These are sorted by the user and thrown into bins, which are usually yellow, and sent to sorting centres.

There, materials are sorted mechanically then balled to be sent to recycling companies (Papeterie de la Seine, Dalle Hygiène Production, SITA, TIRFER, ALCAN and UPM).

Glass has a specific collection of its own set up directly by the municipalities, either by voluntary drop-off or by selective collection in containers exclusively reserved for glass. It is sent directly for processing to Verre Avenir. Only three municipal councils take the glass that they have collected in the SYCTOM sorting centre to Nanterre.

• **Bulky items and waste deposited in waste collection centres** (mainly metals, cardboard, wood and rubble)... bulky items collected separately and non-sorted waste from the waste collection centre are taken to the sorting centres that are equipped to take them. Waste deposited in waste collection centres and sorted directly into containers

(metals, cardboard, rubble, wood, textiles, glass) by the users are sent to recycling companies for materials recovery.

• **Materials resulting from incineration:** clinker, ferrous metals and aluminium. Clinker is used in public works for the construction of road base-layers; ferrous metals and aluminium are extracted from the clinker and recycled in the steel industry.

Certain waste that has been sorted or deposited in waste collection centres is nevertheless inappropriate for recycling because it is unclean or consists of a mixture of materials that are currently not recyclable. This sorted residual waste is incinerated in energy production centres or considered as residual waste and buried in landfill sites. Part of this residual waste will soon be treated in SYCTOM methanization centres, thus reducing the quantities buried and incinerated.





Waste from selective collections is sorted by the user and thrown into bins, which are usually yellow, and sent to sorting centres.

A constant increase in tonnages of waste sorted

Between 2001 and 2005, selective collections received in SYCTOM sorting centres increased by 56%: quantities increased from 91,375 tonnes to 142,513 tonnes. Glass tonnage increased by 32%, with 101,249 tonnes collected in 2005 compared with 76,675 tonnes in 2001.

This spectacular increase is explained by the implementation of multimaterial selective collection in all SYCTOM member communities and particularly in the districts of Paris since 2002 as well as the growing participation of the territory's inhabitants in the practice of sorting.

Because the quantity of waste recycled depends on the quality of waste collected, vigilance is still required since the performances of selective collections by inhabitant remain irregular throughout SYCTOM's territory. Therefore, in order to increase the quantities collected whilst reducing the amount of residual waste from the sorting process, the selective collection must be accompanied by repeated actions of communication with the residents and constant monitoring of the quality. In 2005, waste collected by selective collection on the SYCTOM territory (including glass) represented 9% of waste, compared with the national average of 12%.

For its part, SYCTOM encourages the municipal councils to increase selective collections by giving them a subsidy of €45.73 per tonne of selective collection, to which is added the exoneration from the €75.62 tax per tonne payable on waste to be treated, amounting to a total saving of €121.35 per tonne of selective collection for the municipal councils in 2005.

The tonnage of bulky items being brought into the centre continues to grow. Between 2004 and 2005 it increased by 5%, going up from 190,335 to 199,602 tonnes.

Éco-Emballages: SYCTOM adopts schedule D

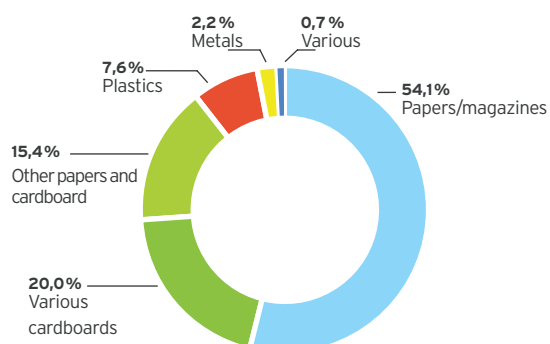
In 2005, SYCTOM decided to abandon Éco-Emballages's schedule C which had been accepted for the past six years, in favour of schedule D, a backing financially more beneficial per tonne sorted. Thus, when the level of overall performance for the five materials gathered goes beyond 25%, the backing is increased. Other

benefits: support for energy production is simplified and a new aid for methanization is created. As previously, the contract with Éco-Emballages is valid for six years and consists of a principal contract signed with SYCTOM and ancillary contracts signed with the various member local authorities.

On the other hand, tonnages of waste received in SYCTOM waste collection centres in 2005 dropped by 31%, due to the fact that they were only open to the residents of the member communities and the subsequent diversion of professional waste towards private centres: SYCTOM received 40,375 tonnes this year compared with last year's 58,499 tonnes. On account of the recent construction of new waste collection centres by member local authorities, the overall capacity for receiving and recycling waste on SYCTOM territory will be growing.

* Figures: Ademe 2002.

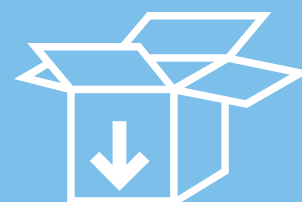
Breakdown of materials sorted in selective collection sorting centres



Tonnages received = 142,513 t / Total recovered = 99,609 t

Pick-up channels chosen by SYCTOM for the recyclable materials

Materials	Channel	Type of pickup	Tonnages recycled (figures for 2005)
Recyclable domestic packaging (cardboard),	Papeterie de la Seine	Guaranteed pickup proposed by authorised organisations via pickup companies	19,148
Liquid food packaging (food cartons)	Dalle Hygiène Production		773
Ferrous metals resulting from selective collections and clinker	TIRFER	Guaranteed pickup proposed by operators	44,277
Aluminium resulting from selective collections and clinker.	ALCAN	Guaranteed pickup proposed by authorised organisations via pickup companies	2,593
Plastics (bottles)	SITA	Guaranteed pickup proposed by operators	7,596
Newspapers/magazines	UPM	Direct contract	53,894



SYCTOM's sorting and waste collection centres

The sorting centres are essential links in the recycling chain and factors in selective collection development as they collect recyclable materials resulting from selective collection and bulky items. SYCTOM de l'Agglomération parisienne has three selective collection sorting centres, two sorting centres for bulky items and three waste collection centres.



• **Ivry-Paris XIII:** the first multiprocessing centre in the urban area of Paris, since 1997 it consists of an incineration unit, a waste collection centre and a selective collection sorting centre, amounting to a capacity of 33,000 tonnes/year. In 2005, modernisation works were carried out on the sorting process.



• **Nanterre:** this is the most recent of SYCTOM's equipment, in service since June 2004. Its design and construction are in conformity with the principles of high environmental quality and represent a global investment of 20 million euros. This sorting centre processes selective collections from one million residents of Paris and the area west of Paris. A year 40,000 tonnes capacity which 30,000 multimaterials and 10,000 monomaterials collection.



• **Romainville:** this site combines a selective collection and bulky items sorting centre with a total capacity of 130,000 tonnes/year. There is also a waste collection centre and a transfer centre whose purpose is to regulate the flow of household waste. This is the first high-capacity sorting centre established in France and has been open since 1993.



• **Saint-Denis:** this consists of a waste collection centre and a centre specifically for sorting bulky items and transferring them by waterway. It has an annual capacity of 60,000 tonnes. It is to undergo a renovation programme.

Due to the high increase in selective collections on its territory, SYCTOM has to resort to procurement contracts for the use of eleven private centres located at Arcueil, Châtillon, Ivry, Rungis, Buc, Gennevilliers, Nanterre, Chelles, La Courneuve and Blanc-Mesnil.



An environmental quality charter between SYCTOM and the host town has to be signed for all future selective collection centres in member municipalities.

The selected collection sorting centre project in Paris XV. Opening is planned for January 2008.

> SYCTOM projects

Several sorting centres are under construction or being studied

SYCTOM has several projects and is continuing to take steps to increase its sorting capacity in order to accompany the development of selective collection within the member municipalities.

• **Isséane, at Issy-les-Moulineaux:** this future sorting centre and energy production centre is planned to open in summer 2007 and will assure the recycling of household waste from over one million inhabitants of Paris and the area west of Paris. The sorting centre will process 20,000 tonnes of household packaging and 35,000 tonnes of bulky items each year.

• **At Sevran:** this centre has a capacity of 10,000 tonnes per year and will process selective collections from an area consisting of 11 communes of Seine-Saint-Denis, amounting to 350,000 inhabitants.

Works totalling 15.5 million euros will start in September 2006 with the opening planned for the first quarter, 2008.

• **In Paris XV:** this centre is located in rue Herry-Farman between the heliport and the ring road. It has a capacity of 15,000 tonnes per year and will be dedicated to selective collections of multimate-rials from Paris XIV and XV districts. Works representing an investment of 20 million euros will start in the second half of 2006 and the centre is planned to be put into service in January 2008.

• **In Paris XIII:** a sorting centre and centre for transfer of large waste objects by waterway is planned for 2010.

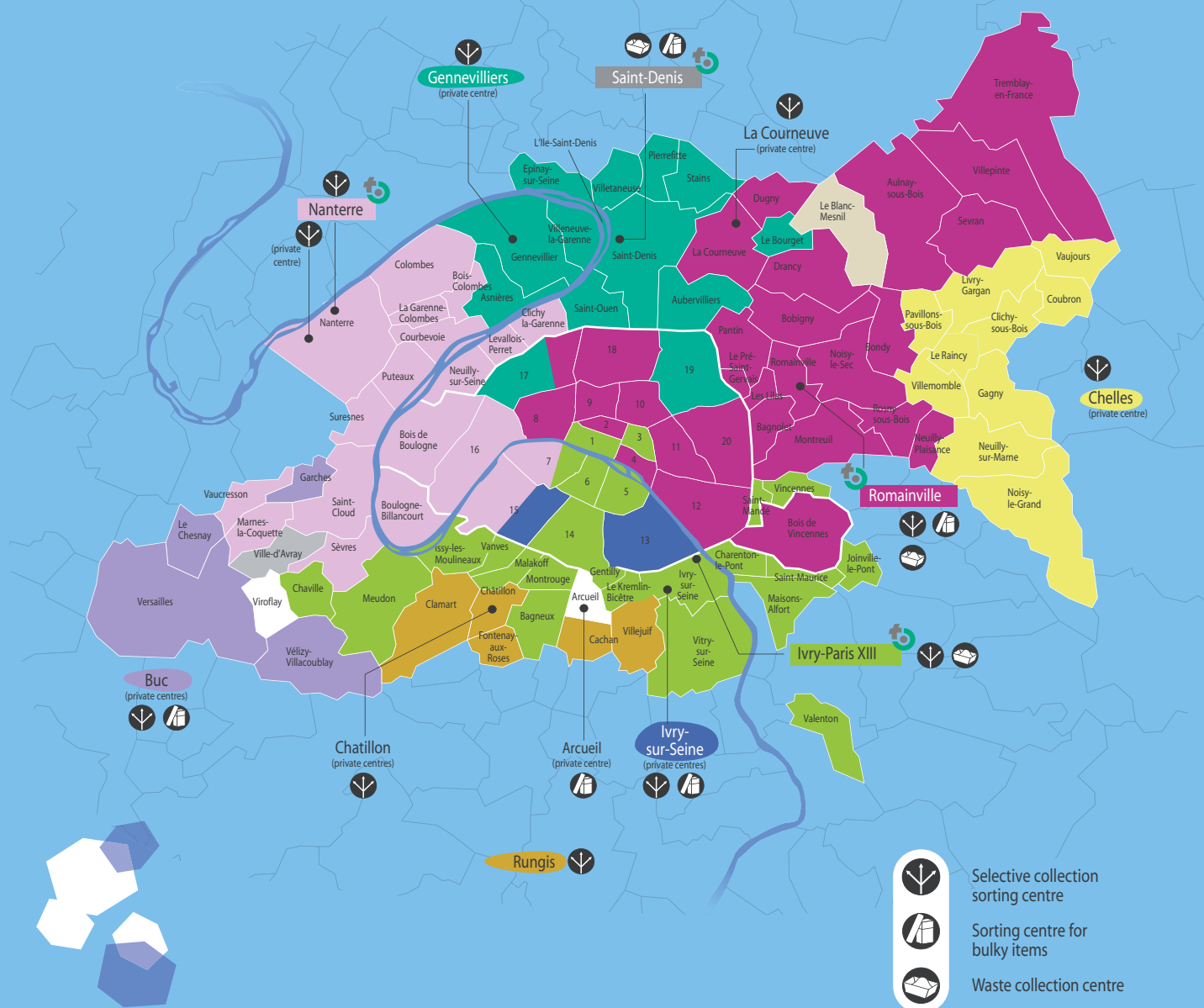
• **In Paris:** two other projects involving the construction of selective collection sorting centres within inner Paris are being studied:

one at Batignolles (VXII^e) for 30,000 tonnes a year and one at Bercy (XII^e) for 60,000 tonnes a year, as part of urban development projects for the area that are being drawn up.

As for its previous constructions, SYCTOM will sign an environmental quality charter with the host towns for this equipment to jointly ensure regular monitoring of the centre's activity. Construction of these inner city sorting centres show SYCTOM's intention to accompany the development of selective collection while maintaining the policy for environmental protection and management of collection costs for the member local authorities.



Selective collection and bulky items sorting centres mobilized by SYCTOM

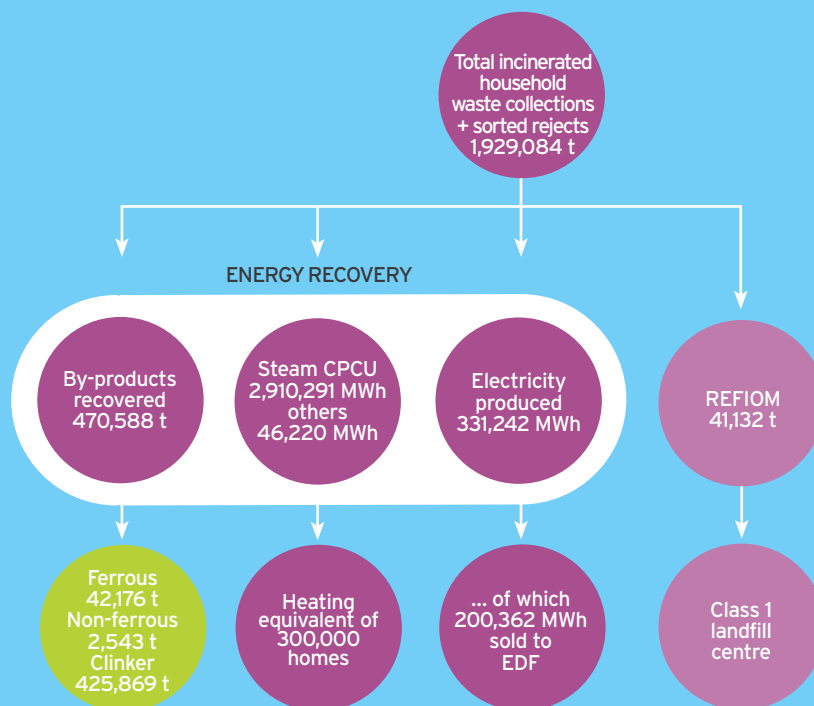


Centres	Tonnage received			Tonnage recycled			Operators
	selective collections	bulky items	waste collection centre	selective collections	bulky items	waste collection centre	
Ivry-Paris XIII	31,534		5,160	22,808		4,461	SITA
Nanterre	26,697			20,498			Généris
Romainville	40,397	76,509	26,770	25,390	32,259	13,973	Généris
Saint-Denis		63,411	8,445		24,863	6,004	Généris
Arcueil		33,090			3,640		SITA
Buc	6,982	10,554		5,658	1,135		Nicollin
Chelles	8,247			6,833			Généris
Gennevilliers	11,660			8,364			SITA
Ivry	11,083	16,038		5,012	4,228		Valor Industries/Revival
Rungis	5,390			4,538			SIEVD
Châtillon/Nanterre/ La Courneuve	522*			504			Généris/Taïs
Total	142,513	199,602	40,375	99,607	66,125	24,438	

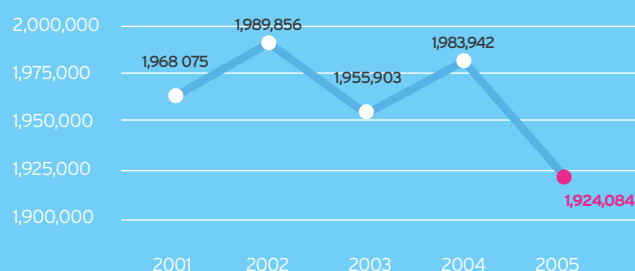
*office paper

> Energy recovery

When waste becomes a source of energy



Evolution of tonnages of waste processed by SYCTOM by incineration with energy production (all centres included)



The drop noted in 2005 was linked to the work to bring SYCTOM's equipment to within the statutory norms that led to technical closures.

Incineration, a necessary method of treatment

Incineration is a technique that is already old. It has benefited from great technical innovations since the creation of the early incinerators. The generation of energy from non-recyclable household waste was established in the 1920's in the city of Paris. It has several advantages. It makes it possible to:

- reduce the volumes of waste and avoid burial in landfill sites;
- recuperate energy produced by the combustion of waste, either as steam to fuel the urban heating system, or as electricity;
- generate various recyclable materials clinker/slag, residual solids from incineration, is processed and used in public works, while ferrous metals and aluminium are returned to the metalworks;
- concentrate pollutants initially contained in waste or generated by incineration in the ashes and "REFIOM" (Residues from the Incineration Smoke of Household Waste). After treatment that renders them inert, they are buried in specialised centres.

Currently, incineration with energy production remains the primary method of processing household waste, although the quantity of residual household waste received by SYCTOM has decreased by 2% between 2001 and 2005. This drop has its explanation in the development of selective collections and in a more general manner, in a slowdown in consumption in French households.

Increasingly environmentally-friendly processing systems

Incineration with production of energy is currently the most satisfactory method, where the environment is concerned, for treating the major part of the usual collections in the city of Paris. The installation of new smoke emissions processing systems and SYCTOM's efforts to develop the recycling of material and organic waste, together with the evacuation of by-products by waterway, are making the processing of household waste increasingly environmentally friendly. Although incineration with energy production currently constitutes the primary method of processing waste on SYCTOM's territory, tonnages will soon be reduced in favour of recycling organic waste. In fact, the creation of the first methanization unit at Romainville will make it possible to valuable 150,000 tonnes of compostable waste obtained from 315,000 tonnes household waste.





The energy produced by burning waste in the energy generating centre at Ivry-Paris XIII makes it possible to heat the equivalent of 100,000 homes each year.

Energy recovery and materials recovery

In 2005, SYCTOM's three incineration and energy generating centres, along with the six private units that it also uses, have processed a total of 1,929,084 tonnes of waste. This waste is the result of traditional collections (brought in directly or transferred), residual waste from the sorting processes, green waste and waste from road sweeping and cleaning.

Over the year, this treatment has generated several by-products:

- 2, 910, 291 MWh of steam, sold to the CPCU (Compagnie parisienne de chauffage urbain- the paris urban heating compagny), making it possible to heat 300,000 homes, with a saving of 298,208 toe (tons of oil equivalent) and a lower production of greenhouse gases;
- 46,220 MWh of steam sold by the private incineration centres;
- 200,362 MWh electricity sold to EDF (Electricité de France);
- 42,176 tonnes of ferrous metals;
- 2,543 tonnes of aluminium;
- 425,869 tonnes of clinker from which are re-extracted 35,821 tonnes of scrap metal.

Nine incineration units mobilized

SYCTOM has three incineration and energy generating units, whose operation is ensured by one private operator.

- **The centre at Issy-les-Moulineaux:** when this was created in 1965, it was the first in France to be equipped with a system for large scale energy recuperation. It is also SYCTOM's oldest energy production unit. This centre, which recycled 553,147 tonnes of household waste in 2005, was to have stopped its incineration activity on December 28 to be converted to a provisional waste transfer centre. But due to

Energy and materials recycled in 2005

	Quantity
Steam sold	2,956,511 MWh
Electricity sold	200,362 MWh
Clinker	425,869 tonnes
Ferrous metals sold	42,176 tonnes
Non-Ferrous metals sold	2,543 tonnes

the delays in installing the supplementary boilers required by the CPCU (Compagnie parisienne de chauffage urbain) during the very cold spells and in order to satisfy the heating requirements of 5,000 homes and public amenities, the State requisitioned the factory to function as an additional heating unit until 22 February 2006. Between then and the opening of the Isséane site in 2007, this site that has been reconverted into a transfer centre is receiving 320,000 tonnes of waste per year and directing it to processing centres in Ile-de-France. A local commission of information and surveillance (CLIS) composed mainly of State associations and services, has been set up on the initiative of the Prefect of the department of Hauts-de-Seine in order to follow the functioning and performances of the centre. This CLIS, which is also monitoring the construction at Isséane, holds regular meetings. A meeting was held in October 2005.

- **The centre at Ivry-Paris XIII:** this was built in 1969 and in when it was modernised in 1997 it became the first operational multiprocessing centre in the urban area of Paris, consisting of a sorting centre, a waste collection centre and an energy production centre. It has the capacity to incinerate 730,000 tonnes annually and receives traditional collections from 1.2 million inhabitants. Since 1995, 158,000 tonnes of incineration clinker each year have been sent by waterway to a processing centre at Lagny-sur-Marne, thus avoiding the road traffic of 6,800 bulk transport trucks on the roads of Ile-de-France.

Together with the Ivry-sur-Seine Town Hall, discussions started in 2003 for the future of this centre in 2010. Under the authority of the Prefect of Val-de-Marne, the CLIS meets once a year to assess the environmental performance of the centre.

Air pollution control Figures for campaigns run in 2005 and first quarter 2006

Type of rejects	Ministerial order		Ivry-Paris XIII					Saint-Ouen					Issy-les-Moulineaux			
	25/01/1991 ⁽¹⁾	20/09/2002 ⁽²⁾														
	Concentration in mg/Nm ³		03/05	06/05	07/05	11/05	03/06	02/05	06/05	09/05	10/05	03/06	03/05	06/05	08/05	10/05
Dust	30	10	15	10	4	7	5	8	4	6	5	5	10	23	32	30
Hydrochloric acid	50	10	6.30	0.80	0.40	4	0.80	0.50	0.50	0.90	1.80	0.10	0.50	2.80	1.70	0.70
Hydrofluoric acid	2	1	0.30	0.16	0.15	0.17	0.10	0.33	0.04	0.27	0.48	0.10	0.05	0.10	0.14	0.33
Sulphur dioxide	300	50	36	37	75	13	27	6	9	12	14	13	10	17	31	23
Nitrogen oxide	–	200 (80**)	392	382	410	284	52	339	38	36	40	39	336	338	360	339
Lead+chromium+copper+manganese	5	–	0.62	0.18	0.12	0.19	–	0.18	0.12	0.07	0.17	–	0.26	0.33	0.55	0.68
Nickel+arsenic	1	–	0.01	0.02	0.01	0.02	–	0.02	0.03	0.01	0.03	–	0.01	0.01	0.08	0.10
Cadmium + mercury	0.20	–	0.07	0.04	0.03	0.02	–	0.01	0.03	0.02	0.03	–	0.04	0.05	0.04	0.04
Cadmium + thallium	–	0.05	–	–	–	–	0.02	–	–	–	–	0.03	–	–	–	–
Mercury	–	0.05	–	–	–	–	0.00	–	–	–	–	0.01	–	–	–	–
Antimony+arsenic+lead+chrome+cobalt+copper+manganese+nickel+vanadium	–	0.50	–	–	–	–	0.11	–	–	–	–	0.10	–	–	–	–
Dioxins and furans (in ng/Nm ³)	10.00*	0.10	1.20				0.04	0.02				0.03	1.70			

These atmospheric emission controls are carried out by the IRH and SOCOR laboratories.

*Limit values fixed by the minister, in nanograms per cubic metre (ng/Nm³).

**Limit value fixed by the Ile-de-France air pollution control plan.

(1) Emission limit values applicable prior to 28/12/2005

(2) Emission limit values applicable from 28/12/2005

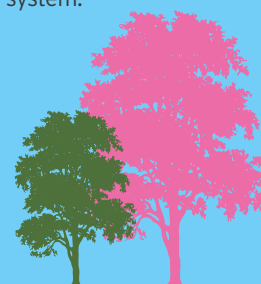
More efficient smoke treatment systems give performances well above required standards

The European directive of 4 December 2000 was transposed into French law by government order of 20 September 2002 and applicable from 28 December 2005. This directive raises the level of environmental requirements for waste incineration plants by reducing the authorised limits of the levels of air pollution emissions. It also introduces limits for other pollutants which until then had not been targeted, such as dioxins, furans and nitrogen oxides. SYCTOM had anticipated these new norms and in 2000 started an important improvement programme for its smoke treatment system at the Saint-Ouen centre and, in 2001, at the Ivry-Paris XIII site.

The Syndicate has installed two extra systems to the outlets of each incinerator: a basic scrubber to reduce the emission rate of sulphur dioxides and a catalytic reactor that destroys dioxins and furans and nitrogen oxides. New systems have also been installed at the energy production centre at Ivry-Paris XIII: each processing line is now equipped with an extra electrofilter, a catalytic reactor and a treatment system for acid pollution, dioxins and sulphur oxides. These works to bring systems up to the new standards have represented a global cost of 84 million euros, of which 23 million euros come from subsidies from the Ile-de-France regional council and Ademe, (*Agence de l'environnement et de la maîtrise de l'énergie*-the French Environment and Energy Agency). Thanks to these systems, smoke is treated to a standard above that of the statutory obligation: dioxin emissions are reduced by more than 90%,

nitrogen oxides are reduced to below the new threshold (less than 60 mg/Nm³ at Saint-Ouen and Ivry instead of the 80 recommended by the Ile-de-France air pollution control plan), and the emissions of sulphur dioxides by 74% (13 mg/Nm³ in November 2005 at Ivry-Paris XIII instead of 50).

The new legislation also reinforces the monitoring of discharge: the operator must use emissions analysers continuously for nitrogen oxides, sulphur oxides and dusts and periodically for heavy metals and dioxins. At the Ivry-Paris XIII site, a continuous dioxin sampling system has been installed on each chimney. In the event of a variation of the levels beyond the authorised limits, it must be capable of guaranteeing correction within a maximum of four hours or close the system down. Moreover, the cumulated period of those variations must not exceed sixty hours per furnace per calendar year, or the system will be closed until the end of the current year. SYCTOM has also reinforced its system monitoring gas pollutants that the operator can constantly follow on control screens in the control room. Supplementary analysers guarantee the reliability of the measuring system, which is connected to the warning and automatic shut-off system.





The worksite of the future Isséane centre. It is planned to be put into service in July 2007.

460,000

tonnes of non-recyclable waste per year will be used for energy production by the future Isséane centre, making it possible to heat 80,000 homes.

- **The centre at Saint-Ouen:** this was constructed in 1990 and is SYCTOM's most recent energy production centre. From its conception it has benefited from the most advanced techniques in smoke treatment and site integration. It has the capacity to process 630,000 tonnes annually and receives traditional collections from over 1.3 million residents. Since 2001, clinker emanating from energy production is sent by rail to Saint-Ouen-l'Aumône (Val-d'Oise), thus avoiding transport by road by 6,500 dumper trucks each year. A local commission of information and surveillance (CLIS), is soon to be set up on the initiative of the Prefect of Seine-Saint-Denis. Because one of SYCTOM's priorities is to reduce landfill, it has used six private centres in order to add to its energy development capacities. These centres, situated at Argenteuil, Massy, Monthyon, Rungis, Saint-Thibault-des-Vignes and Saint-Ouen-l'Aumône, have received 99,283 tonnes of household waste from SYCTOM member municipalities. Due to long-term contracts signed directly with SIGIDURS, 4 municipal councils of Seine-Saint-Denis, (Pierrefitte, Stains, La Courneuve and Dugny) in 2005 incinerated 40,468 tonnes in this syndicate's factory at Sarcelles.

> The SYCTOM project

Isséane, the future sorting and energy production centre

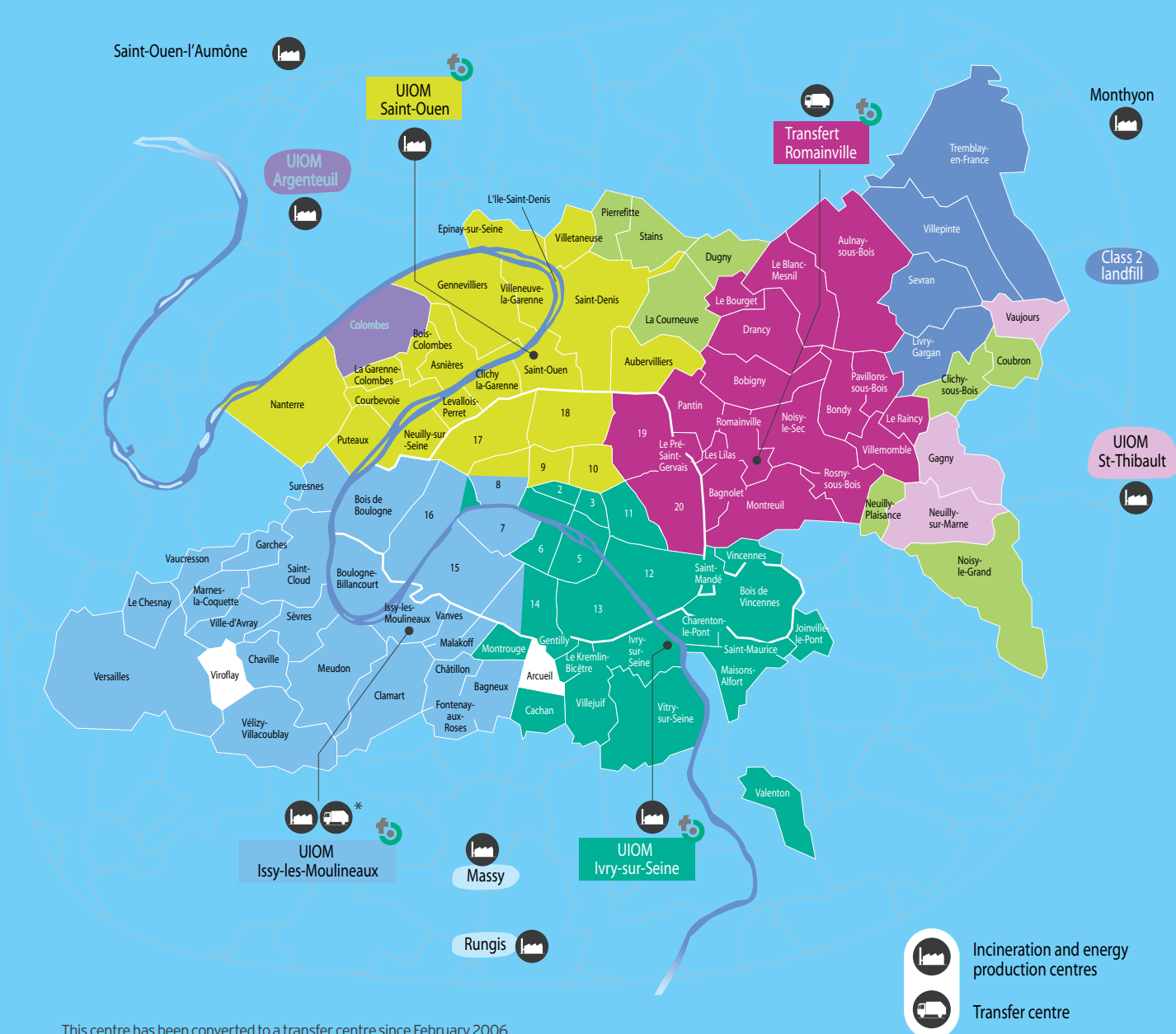
This multiprocess centre currently under construction is located at Issy-les-Moulineaux, quai Roosevelt, at the gates of Paris. It will replace the energy development centre at Issy-les-Moulineaux. This project was declared of general public interest in March 2000. It forms part of the Departmental Plan for Waste Elimination (PDED) in Hauts-de-Seine. The facility will process household waste collected from a catchment area consisting of 17 municipal boroughs in Hauts-de-Seine, three in Yvelines and three arrondissements in the west part of Paris, representing over a million inhabitants.

From 2007, when it will come into service, this centre will process 460,000 tonnes of non recyclable waste annually by means of energy production, which will provide heating for 80,000 homes and generating and saving of 110,000 tonnes of oil-equivalent. Thanks to its sorting centre the

factory will also process 50,000 tonnes of packaging and bulky items in materials recovery. A charter of environmental quality, signed on 20 December 2000 with Issy-les-Moulineaux council, guarantees the conditions of quality, safety and environmental protection during the four years of works and 40 years of operation.

After foundation works, which lasted two years, delivery of industrial equipment started in December 2005 and will continue until the centre is put into service in 2007. The CLIS in charge of monitoring the construction and functioning of the future Isséane multiprocess centre meets once or twice a year. In 2005 a meeting took place in October. There is also a panel of local residents, watchdogs, in charge of checking and warning in the event of nuisance during the work and when the centre is running.

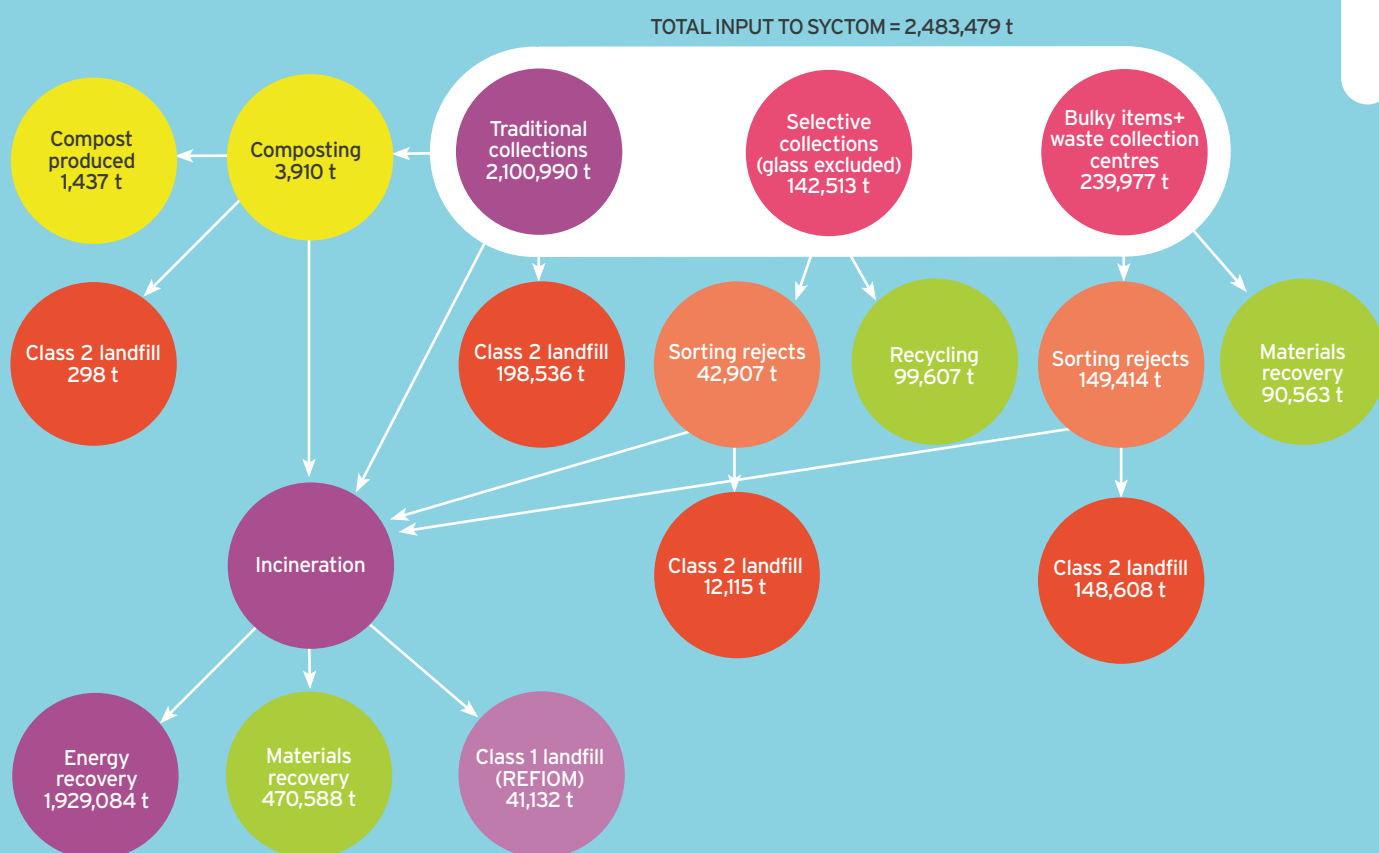
Energy production centres mobilized by SYCTOM



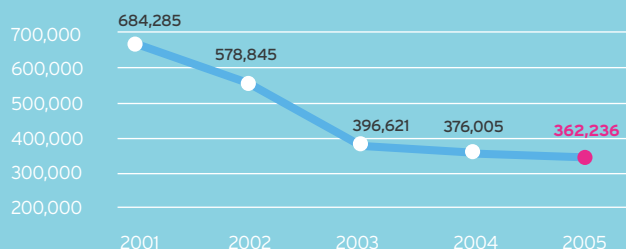
This centre has been converted to a transfer centre since February 2006.

Centres	Tonnage received		Recovery			Exploitants
	Household waste	steam sold (MWh)	electricity sold (MWh)	clinker (t)	Scrap metal sold (t)	
Issy-les-Moulineaux	553,147	768,478	70,604	121,791	14,259	TIRU
Ivry-Paris XIII	654,312	919,497	105,975	142,168	14,205	TIRU
Saint-Ouen	650,479	1,222,316	12,599	138,138	11,554	TIRU
Argenteuil	48,615	20,597	6,967	12,607	975	Généris
Massy	3,756	5,663		915	28	Curma
Monthyon	4,707		1,593	1,108	69	Généris
Rungis	4,974	6,714		877	118	Généris
Saint-Ouen-l'Aumône	11,176	13,246	2,194	2,734	145	Généris
Saint-Thibault-des-Vignes	26,055		429	5,532	823	Novergie
Total	1,957,221	2,956,511	200,362	425,869	42,176	

> Landfill, Only for residual waste



Drop in tonnages of waste buried in Class 2 landfill sites by SYCTOM since 2001



* This waste is made up of residual household waste, bulky objects unsuitable for recovery and sorting rejects and waste which are buried in Class 2 landfill sites.

Landfill, the last-resort solution

Since 1 July 2002, landfill, also called tipping or storage, is used only for residual waste. According to the law of 13 July 1992, this term is used to define waste from which the recoverable part has been extracted and waste that cannot be treated using current technical and economic means. This definition is deliberately kept an open one. On the ground it can differ considerably as it depends much on local situations. Thus, certain waste that will be considered residual waste in an area where there is no incineration centre will not be categorised as such in a zone which does have such a centre, since here it can be processed and produce energy. Therefore the idea of residual waste can vary from department to department or even within a department.

Where SYCTOM's territory is concerned, landfill concerns large, non-recyclable objects, residual waste from waste collection centres, sorting rejects from selective collections and waste from traditional collections that the Syndicate cannot process in energy production centres due to lack of available capacity. In order to meet its statutory obligations and to follow its strategy of sustainable environmental protection, Syctom has implemented short- and long-term solutions in order to significantly reduce the proportion of household waste buried as landfill, such as: using exterior incineration units, increasing and diversifying its own treatment capacities, improving materials recovery, and reducing the quantities of waste at source. These steps are beginning to show results. At the end of 2005, tonnages of household waste buried in landfill sites were reduced by half compared with 2001.

Different types of landfill site

Landfill sites are installations classed for environmental protection subject to prefectorial authorization.

- **Class 1 landfill sites:** these take only hazardous waste such as industrial waste or, in the case of SYCTOM, "REFIOM" (scrubbing residues from smoke produced by the incineration of household waste), and sludges resulting from the decontamination of water used to clean the smoke. These toxic wastes are stabilised before being stored in order to prevent any change in the residues over the very long term. Once inert and solidified, they are stored in watertight compartments and recorded to ensure their traceability.

- **Class 2 landfill sites:** these receive waste considered as non-hazardous: residual household waste, large non-recycled items, residual waste from selective collections and composting. For all that, their operation is governed by very strict regulatory instructions concerning the recovery of biogas, rainwater drainage, recovery and treatment of leachates, subsoil impermeability and monitoring groundwater quality.

- **Class 3 landfill sites:** these take exclusively inert waste, such as rubble.

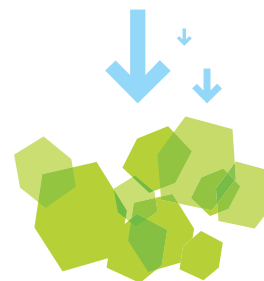




The landfill centre at Claye-Souilly is certified ISO 14001.

- 47 %

less household waste buried
as landfill since 2001.



Four sites outside SYCTOM territory

In view of the urban density of SYCTOM territory, these sites are situated outside its domain. SYCTOM chooses them by tender according to the quality of services proposed, the prices practised and whether the installations meet statutory environmental standards. Landfill sites used by SYCTOM have benefited from various improvements in order to guarantee safe and efficient storage and are equipped with systems to eliminate all nuisances connected with discharge of liquids and gas emissions. The reception of waste is carried out under video monitoring, waste is confined in watertight cells to avoid any pollution of the water-table, liquid effluent is collected and processed, biogas emanating from the decomposition of wastes is recovered and prepared for use.

In 2005, SYCTOM used several landfill centres:

- The Class 1 landfill site at Villeparisis (Seine et Marne) opened in 1995 and is operated by the company SITA France Déchets. It is one of the 12 centres in France authorised for the treatment of residual waste and the second in the Ile-de-France region. In 2005 it received 38,641 tonnes of residual waste coming from SYCTOM in the form of ash and sludge;
- The Class 2 landfill sites at Claye-Souilly (Seine-et-Marne) and Isles-les-Meldeuses (Seine-et-Marne), operated by the companies REP and Capoulade. The Claye-Souilly centre has a capacity of 5,500 tonnes/day, amounting to 15 millions m³ annually. In 2005, it received 299,939 tonnes of waste from SYCTOM. The two other Class 2 sites used periodically by SYCTOM received 2,551 tonnes of waste in 2005;
- One Class 3 landfill site at Claye-Souilly operated by the company REP. In 2005, this centre received a total of 50,376 tonnes of rubble from SYCTOM centres.

> Environmental quality

Environmentally friendly landfill sites

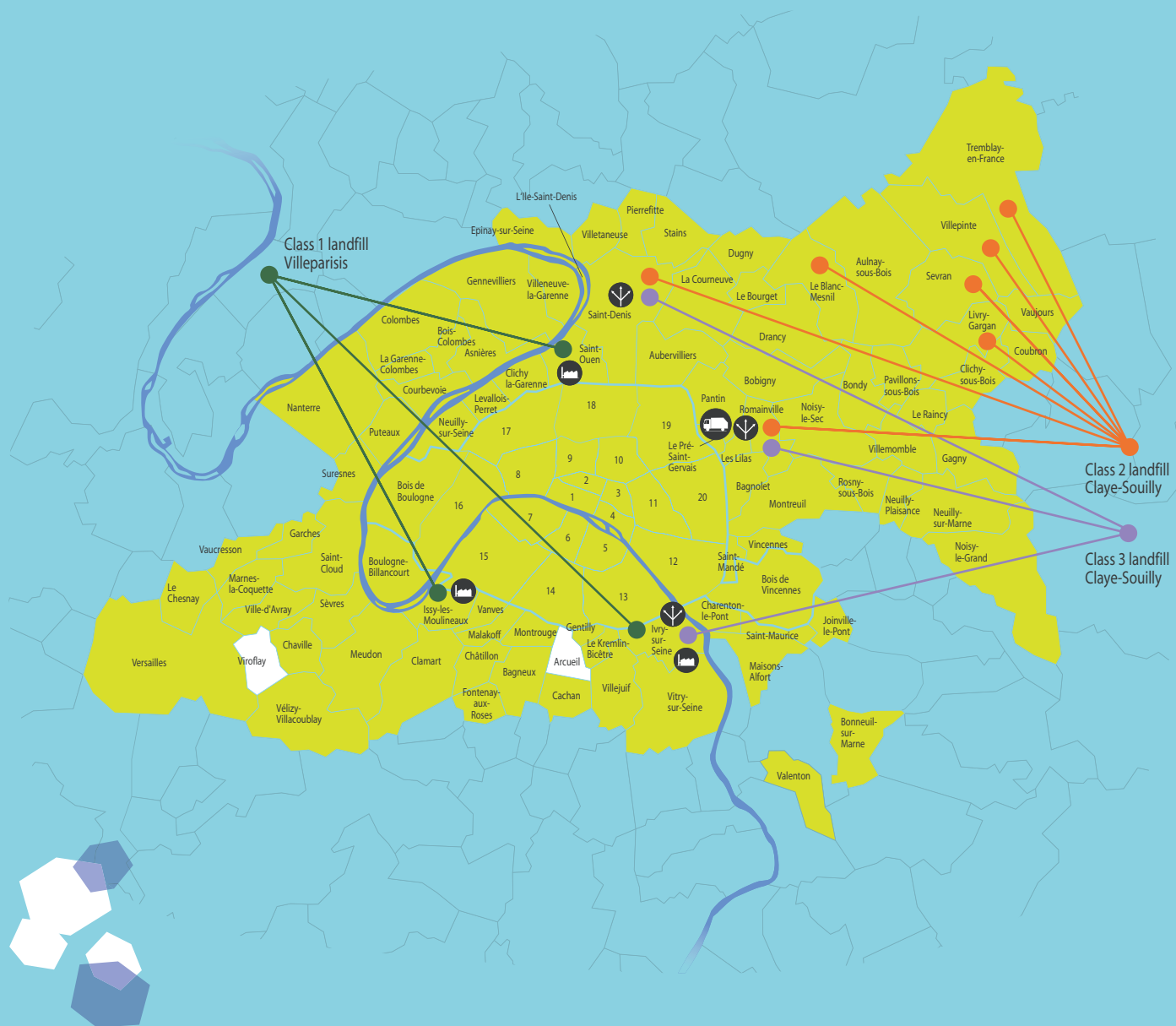
All the sites that SYCTOM uses are certified ISO 14001. This standard guarantees the application of a series of environmental quality measures.

- compliance with the statutory obligations;
- permanent control of the application of environmental texts to the sites;
- identifying and monitoring technological risks and accidental pollution that these

activities could lead to in order to reduce the impact on the environment;

- defining the objectives for continuing improvement of the management of consumption and discharge and respecting these objectives with the aid of indicators;
- information and training of all personnel on the environmental impact linked to their activity.

Landfill centres mobilized by SYCTOM



Tonnages sent to landfill centres under SYCTOM contracts

Landfill centre	Class	Waste sent from	Tonnages	Operators
Villeparisis	Class 1	Issy-les-Moulineaux	12,706	SITA France Déchets
		Ivry-Paris XIII	14,071	
		Saint-Ouen	11,865	
Claye-Souilly	Class 2	SEAPFA et Livry-Gargan	55,928	REP
		Bonneuil	17,144	
		Romainville	203,054	
		Saint-Denis	23,812	
Others centres	Class 2	Romainville	387	Capoulade
		Saint-Thibault	2,164	
Claye-Souilly	Class 3	Romainville	25,359	REP
		Ivry	3,596	
		Saint-Denis	21,421	

› Budget and organization.

2005 budget: commitments adhered to and expenditures controlled in spite of a high increase in costs.

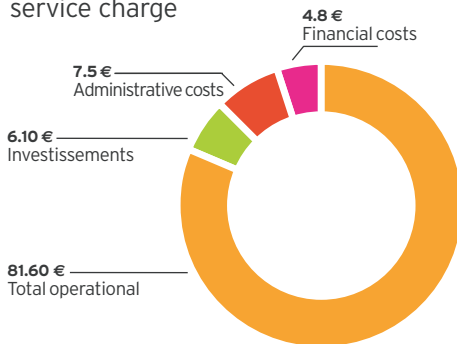


03

**A well-managed
budget,
simplified
organization**

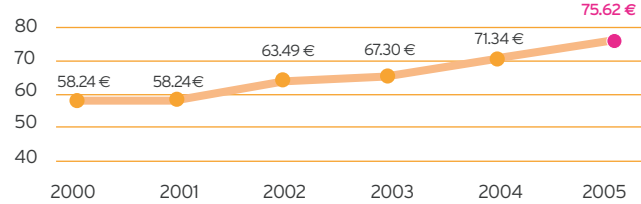


Breakdown of expenditure for every 100 euros service charge



Service charge variations since 2000

(per tonne of waste processed)



The increase of 6% per year in the service charge was decided by the Committee to cover the significant extra costs that will be generated in 2006 and 2007 during the transitory management of household waste previously processed in the energy production centre at Issy-les-Moulineaux.

Expenditure for 2005: controlled in spite of exceptional costs

Between 2004 and 2005, operational expenses rose considerably, going from 233.7 million euros to 279.8 million euros. Three exceptional events are responsible for this increase:

- the setting up of a 17 million euro reserve in order to prepare for the transitory management of waste at the Issy 1 transfer centre in anticipation of the delivery of the Isséane site in 2007 and to smooth the financial effort over the period until that time;
- the cancellation of an income of 20.9 million euros following the litigation between SYCTOM and the State concerning the abandoned Vitry project. The case has been heard and an appeal filed and it is now at the Council of State Court of Cassation;
- the imbalance between income from energy and costs relating to the Issy 1 operation.

Other than these exceptional charges and contingency costs, the increase in the operational costs has been kept to 3.5%. At 177.6 million euros, that is to say 63% of the total the largest budget item is the cost of operational contracts for the different waste treatment units, which represents an increase of 7% over 2004 and is attributed to the costs of fossil fuels and the application of revised market prices. At 16.9 million euros, the second item is financial aid to municipal councils for the development of selective collection and the repayment of the service charge on household waste and bulky items. Between 2004 and 2005, there was a drop of 39% in this expenditure, since in 2004 there was a payment to the member local authorities amounting to 6.7 million euros for service charges for 2003 with regard to real tonnages. The monthly instalments for the tonnage service charge for any given year is provisional and established on the basis of the real tonnage of the previous year. The regularisation is made in the following year on the

real tonnages of the year in question, as happened in 2004 for 2003. Financial costs have increased over 2004, due to the investments made by SYCTOM. These are accounted for mainly by mainly interest on loans (10 M€ actually paid in 2005 compared with 5.7 M€ in 2004), interest on the current accounts overdraft facility (0.42 M€) and accrued interest (5.3 M€). Technical depreciation the assets amounts to 13.4 million euros compared with 20.1 million euros in 2004. This drop comes from the end of the amortisation on the investments made at Issy 1. The 112 strong workforce is necessary for the installation and proper monitoring of the new investments and operating markets and human resources costs totalling 4.9 million euros remain below 2% of the budget.

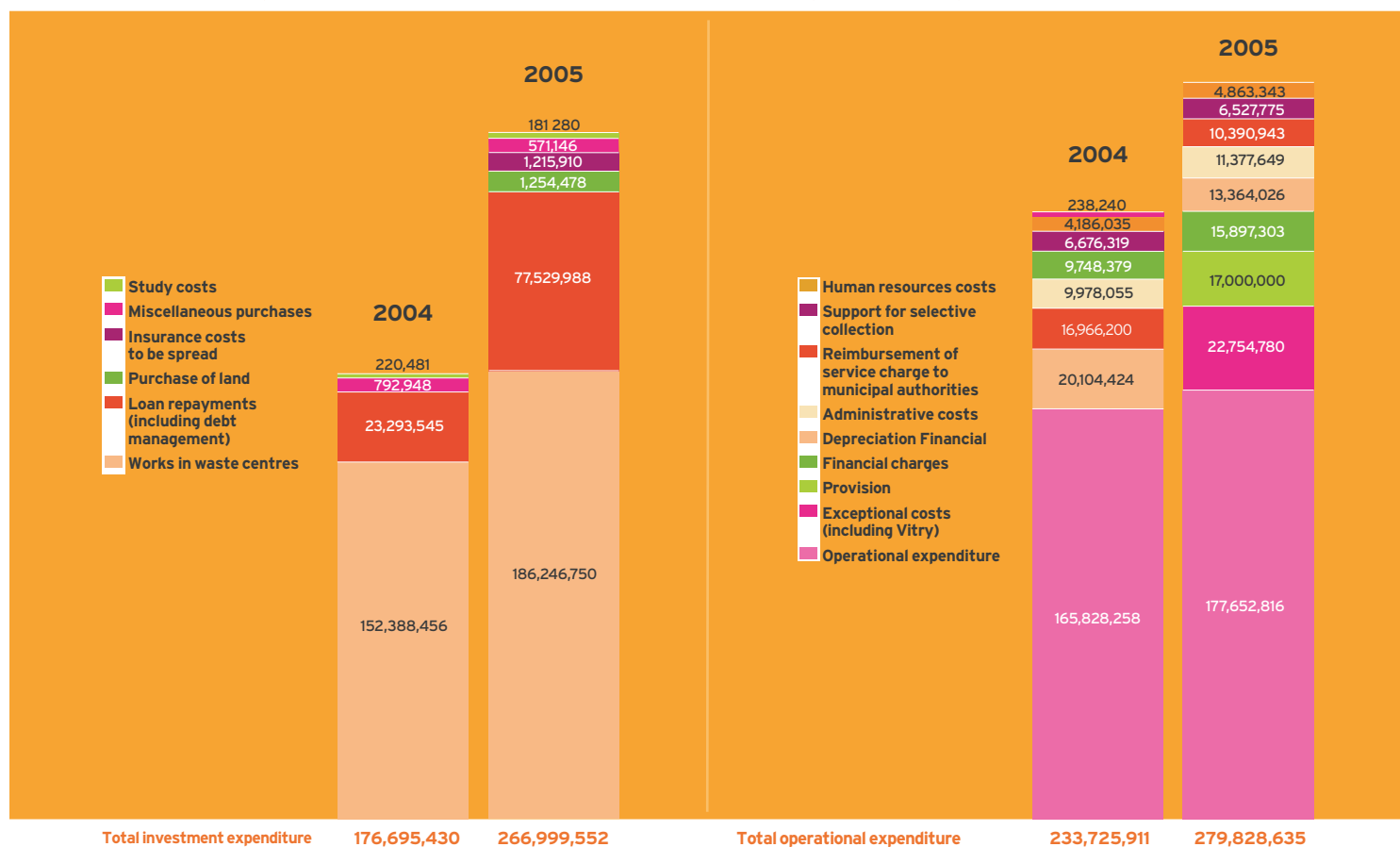
Following the investment programme

Between 2004 and 2005, the investment budget rose from 176.7 million euros to 267 million euros. The expenditure associated with works in SYCTOM processing centres (186.2 M€ VAT incl.) make up the greater part of the investment item, in particular the Isséane site (144.6 M€), and the final work on the SYCTOM energy production centres at Saint-Ouen and at Ivry-Paris XIII to bring them up to standard for December 28th 2005.

A sum of 400,000 euros was spent on the first operational studies for the future sorting centre in Paris XV. Credits were planned in 2005 for feasibility studies and property purchase necessary for the construction of the future methanization unit at Romainville.

Investment expenditure (in € tax included)

Operational expenditure (in € tax included)



Operational income (in € tax included)

Investment income (in € tax included)

Administrative accounts 2005	
Contributions from member municipal councils	218,733,542
Allocations, subsidies (including Éco-emballages) and contributions	11,375,692
Other products from running management (including commercialisation of sorted products)	19,967,784
Exceptional products (VAT receipts - Vitry in 2004)	2,319,138
Result N-1	30,951,837
Total operational receipts	283,347,992

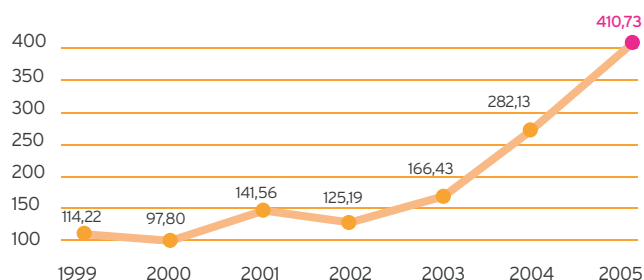
Administrative accounts 2005	
Loan repayments (including debt management and accrued interest)	208,032,972
Subsidies	9,644,013
FCVAT	10,280,425
Depreciation of assets + costs to be spread	13,364,026
Provision	17,000,000
Reserves and result N-1	2,117,328
Total investment income	260,438,765

Investment programme per site (in M€ excluding tax)

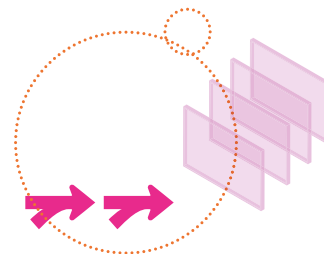
Site	Nature of programme	Periode of réalisation	Works financed in 2004	Works financed in 2005	Total investment
Isséane	Processing centre	1998-2007	92.30	120.83	540.30
Saint-Ouen	Smoke scrubbing	2001-2006	16.30	7.67	39.20
Ivry-Paris XIII	Smoke scrubbing	2003-2006	11.73	23.68	44.49
Ivry-Paris XIII	Bringing up to standard and continuous improvement	2004-2005	0.03	0.11	0.13
Nanterre	Sorting centre	1999-2005	6.82	0.38	20.18
Romainville	Sorting centre	2004-2005	0.20	0.12	0.32
Sevran	Sorting centre	2003-2008	0.02	1.35	15.50
Paris XV	Sorting centre	2004-2008	0.10	0.19	20.11
Études et travaux divers		2004-2005	0.05	0.30	0.35
Romainville	Sorting/methanization centre	2005-2009		0.003	112.58
Issy 1	Transfer centre	2005-2006		2.25	5.65
Total			127.52	156.88	798.82

SYCTOM debt

(in million euros as at December 31st each year)



During 2005 SYCTOM pursued optimised debt management in order to manage the charge of annual repayments, in spite of the increase in inventory stock generated for the financing of new equipment.



Moreover, the works on the Incineration plant at Issy-les-Moulineaux to transform it into a waste transfer station required an investment of 5.7 million euros, of which 2.7 million euros were spent in 2005. Debt repayment was 16.2 million euros compared with 19.5 million euros in 2004, representing 6% of investment expenditure compared with 11% in 2004. In spite of the need for borrowing in 2004, annual repayment of capital dropped in 2005 because certain loans fell due in 2004. These investment costs were also financed by subsidies from Ademe and the Ile-de-France Region (9.6 M€) and VAT repayment for the FCTVA (10.3 M€).

Income from materials recovery is increasing

A service charge, based on the calculation of an average price per tonne (amounting to 75.62 euros per tonne and a contribution of 5.92 euros per resident) is paid by each municipal council to SYCTOM in return for the treatment of its waste. At 218.7 million euros, amounting to 77% of total income, this represents the largest source of operational income. In 2005, the increase of 6% per year in the service charge was decided by the Committee, in line with commitments made over the length of the mandate, to cover the significant extra costs (31 M€/year) that will be generated in 2006 and 2007 during the transitory management of household waste previously processed in the energy production centre at Issy-les-Moulineaux. Other operational income grew in 2005. Several factors explain this increase: the mobilisation of sums registered in the "Terres Vives" contract for the construction of new waste collection sites, renegotiations have made it possible to obtain a significant increase in the price of newspapers/ magazines and plastic for recycling and in 2004 a new contract for 12 years was signed with CPCU (the paris urban heating compagny), guaranteeing the Syndicate's income generated by the sale of steam. The direct sale of energy produced at the Issy-1 site is a source of income for SYCTOM.

In 2005, this generated 11.5 million euros. Sale of energy in the other two energy production centres is also taken into account in the operator's invoicing, reducing the expenses by a corresponding amount. In addition, the financial support paid by Éco-Emballages in connection with the new Schedule D amounted to 11.34 million euros in 2005. The operating surplus for 2004 (30.9 M€) included in the 2005 income will make it possible to finance the extra costs generated by the transitory waste management at Issy 1.

Optimised debt management

On 31 December 2005, the debt outstanding amounted to an overall sum of 410.7 million euros (282 M€ on December 31st 2004). During this year SYCTOM concluded loans totalling 145 million euros. The average duration of residual debt is 26 years with an average interest rate of 3.61%. A proportion of 77% is on a fixed rate at an average rate of 3.91% and 23% on a variable rate for an average rate of 2.62%. During 2005 SYCTOM pursued optimised management of the debt in order to manage the charge of annual repayments, in spite of the increase in inventory stock generated for the financing of new equipment. Entries concerning management of renewable credit have caused an increase of 57.8 million euros in investment expenditures (loan repayments) in the 2005 budget and 57.6 million euros in investment income (loan, including debt management). The provision of 17 million euros has created an investment income of the same amount. Income from depreciation, constituting an operational expense, amounts to 13.3 million euros in 2005. Investment surplus (2.1 M€) for 2004 constitutes an income for 2005. This self-financing of 15.4 million euros in 2005 enabled SYCTOM to restrict the recourse to loans.

Processing costs in 2004 (estimates, current rate)

$$\text{Average gross cost of waste processing (€/tonne)} = \frac{\text{Total operational costs 2005}^*}{\text{Total tonnages processed in 2005}} = \text{€108.05/tonne}$$

(92,55 euros in 2004)

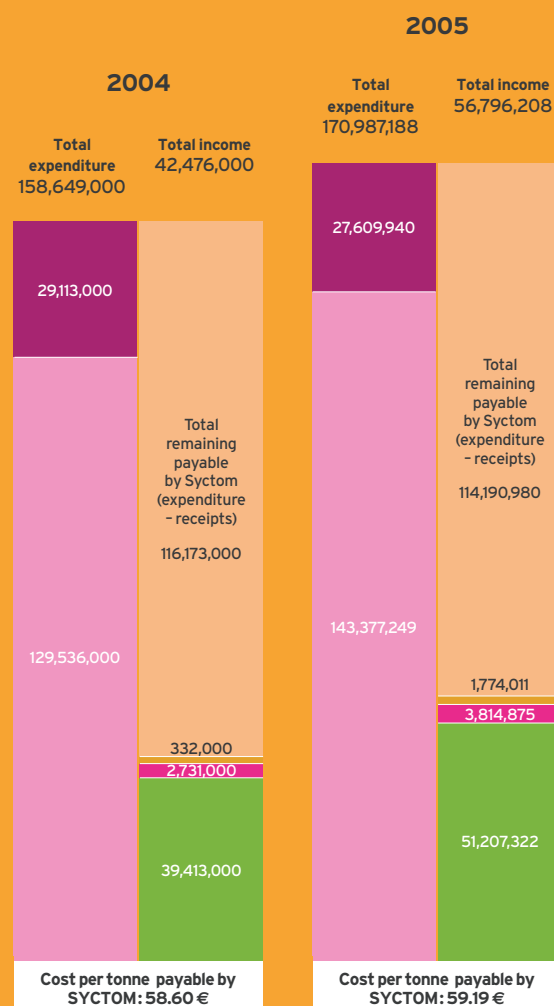
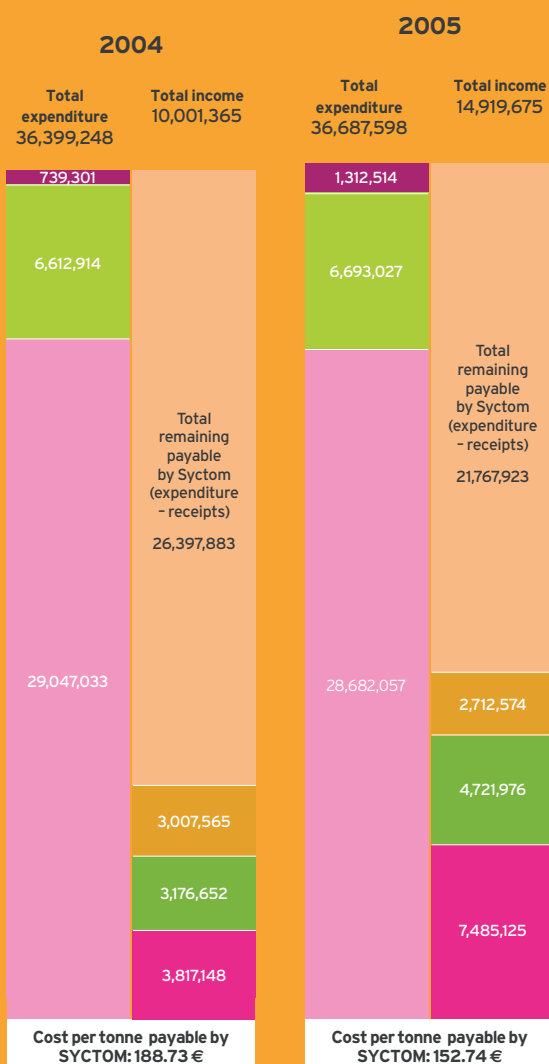
* Excluding compensation in energy income from Issy 1.

Cost of processing selective collections

Drop in expenditure and a rise in income

Cost of incineration with energy production

Stable expenditure with increased income from the direct sale of steam at Issy 1.



Expenditure

- Depreciation and financial costs
- Total support for municipal councils
- Operational costs (tax inc.) (including sorting rejects management)

Receipts

- Total remaining payable by SYCTOM (expenditure - receipts)
- Sale of packaging materials to industries
- Sale of newspapers/magazines
- Support from Éco-Emballages

Expenditure

- Depreciation and financial costs
- Operational costs (tax inc.) (including processing of residues and clinker)

Expenditure

- Total remaining payable by SYCTOM (expenditure - receipts)
- Receipts from recovery of clinker by-products (tax included)
- Support from Éco-Emballages for energy production (tax inc.)
- Receipts from energy (tax inc.) (sale of steam and electricity)

Moreover, in 2005, the cost of processing bulky items was 97.41 euros per tonne (107 euros per tonne in 2004) and the cost of landfill site delivery was 88.63 euros per tonne (87 euros per tonne in 2004).



Elected members visit the Isséane site in January 2005.

The Tenders Committee

The Tenders Committee operates under the authority of the Chairman and consists of five members elected by the Committee. Its role is defined by the Public Contracts Code

and consists of checking the validity of applications and offers before attributing contracts. The Committee met thirteen times in 2005.

Well-balanced organization

The Committee and the Board

The Syndicate Committee is a permanent policy-making body with authority to vote the budget and decide what projects and works to engage in. Since 2004, the representation between the member municipal councils and the two primary syndicates was readjusted and intermunicipal groupings have been taken into account. From now on, 44 municipal councils out of 85 take part in SYCTOM's work and the number of elected members sitting on the Committee has risen from 38 to 68 members.

- 24 representatives of Paris City Council;
- 14 delegates from SYELOM (Hauts-de-Seine);
- 14 delegates from SITOM93 (Seine-Saint-Denis);
- 13 delegates representing local authorities in Val-de-Marne;
- 3 delegates representing municipal councils in Yvelines.

The Board is composed of 36 members.

Note: in 2005 four member municipal councils from the Hauts de Bièvre urban area community (Châtenay-Malabry, Bourg-la-Reine, Sceaux, Le Plessis-Robinson) left SYCTOM while two urban communities (Coeur de Seine and Sud de Seine), members of SYELOM, joined, bringing together the municipal councils who are already members of SYCTOM and SYELOM.

The Committee's major decisions in 2005

In 2005 the Syndicate Committee met four times and took several strategic decisions in line with the strategy of sustainable development that it has adopted:

- to define the programme for **the first methanization unit** at Romainville. The Committee approved the purchase for the sum of 2.85 M€ of some land adjoining the present sorting and transfer centre in order to construct this methanization unit there.

- to develop **transport by waterway** through a four way agreement with the companies SITA, Génériss and UPM stipulating the conditions for the organisation of transport by waterway of the 20,000 tonnes annually of newspapers/ magazines coming from the selective collection sorting centres at Nanterre and Gennevilliers;
- to vote a subsidy of 628,000 € for the **construction of a barge** specifically for waterway transport of newspapers/ magazines between Ile-de-France and Rouen;
- to consolidate the **network of waste collection sites** on its territory through a specific subsidy of 15% (ex taxes) of the civil engineering and equipment cost in order to provide backing for the projects of its member local authorities.
- to encourage the initiatives of the member local authorities promoting **the elimination of plastic carrier bags** at checkouts with an aid of 0.20 € per reusable shopping bag.
- to launch a number of extra project contracts in order to finalise the works on the incineration and energy production centres at Ivry-Paris XIII and Saint-Ouen in order that they come up to statutory standards;
- to sign a new agreement for support with **Éco-Emballages** (schedule D) and select the recyclable materials pick-up channels for six years;
- to present the first account of the actions of the **waste prevention plan** voted in June 2004;
- lastly, to continue current operations: selecting the architectural project of the future **sorting centre in Paris XV**, construction of the processing centre at Isséane and calling for tenders for its operation, starting works at Sevran.



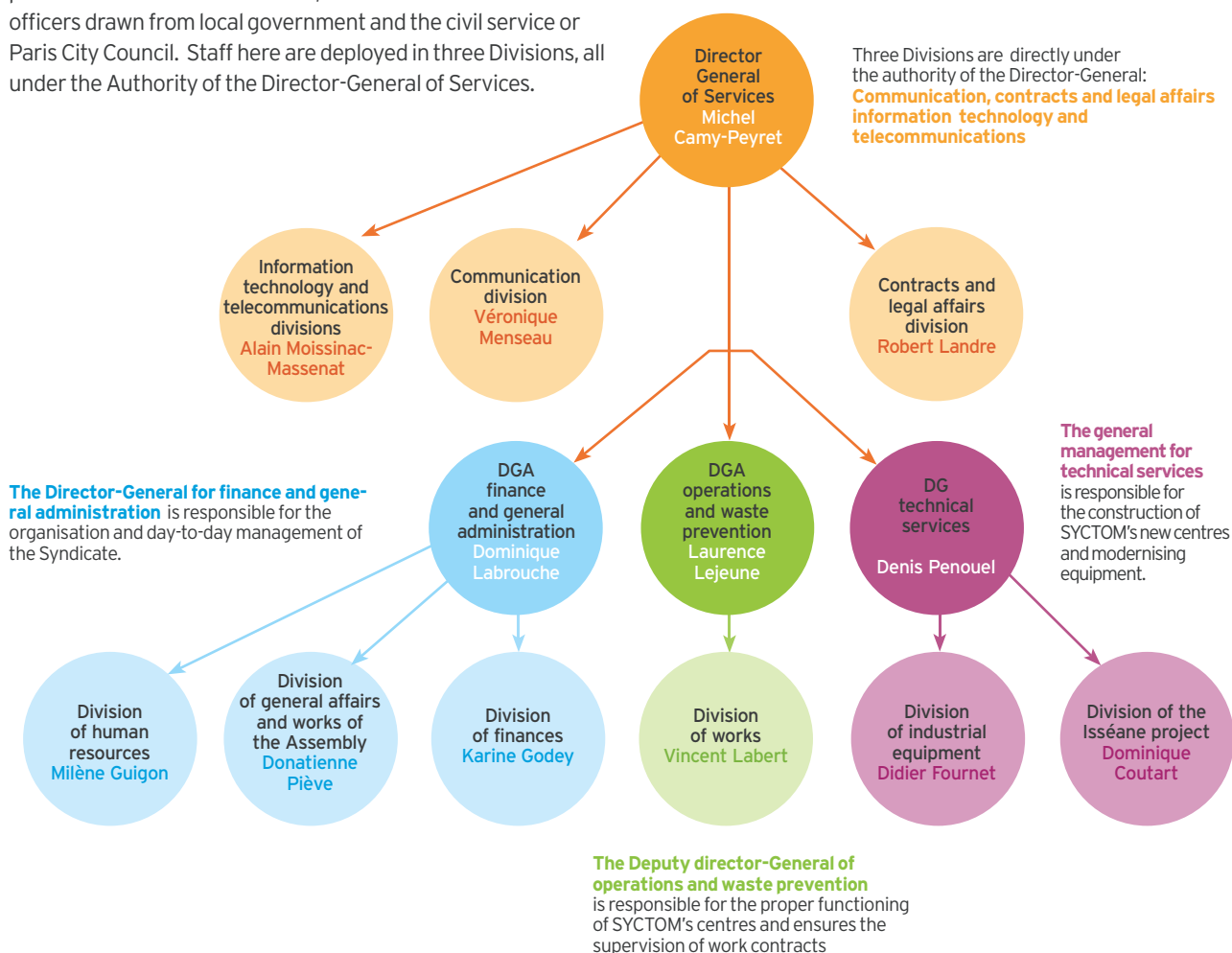
SYCTOM: Exemplary management

SYCTOM is concerned with setting the example within its own administrative system, with selective collection of office paper, taking back and recycling ink cartridges and batteries, installing drinking water dispensers on the premises, dematerialisation of exchanges and procedures and so on. Also, in order to make it easier to share the

































knowledge and experience involved in the management and prevention of waste, SYCTOM has added to its website a new space specifically for its member municipal councils. This space is dedicated to the subject of waste procedures, collection, preventive actions, communication tools and documentation.

Professional teams deployed in six Divisions
















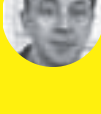












The various departments of SYCTOM de l'agglomération parisienne have 112 salaried staff, technical and administrative officers drawn from local government and the civil service or Paris City Council. Staff here are deployed in three Divisions, all under the Authority of the Director-General of Services.



The 68 members of the SYCTOM Committee in 2005

*		François DAGNAUD Chairman (75)			Alain LE GARREC Councillor of Paris (75)			Josiane BERNARD Deputy Mayor of Bagnolet (93)			
			*		Yves CONTASSOT Vice-Chairman Deputy Mayor of Paris (75)		*		Danielle BRICHOT Deputy Mayor of Stains (93)		
*		Nicole AZZARO Vice-Chairman Councillor of Paris (75)	*		Jérôme COUMET Councillor of Paris (75)				Jean-Pierre COMTE Deputy Mayor of Drancy (93)		
*		Jean-Charles BARDON Councillor of Paris (75)	*		Roxanne DECORTE Councillor of Paris (75)	*		Sophie MEYNAUD Vice-Chairman Councillor of Paris (75)	*		Michel DEBAILLY Town Councillor of Drancy (93)
		Jean-Didier BERTHAULT Councillor of Paris (75)	*		Laurence DOUVIN Councillor of Paris (75)			Christophe NAJDOVSKI Councillor of Paris (75)	*		Gérard GAUDRON Vice-Chairman Mayor of Aulnay-sous-Bois (93)
*		Geneviève BERTRAND Councillor of Paris (75)			François FLORES Councillor of Paris (75)			Cécile RENSON Councillor of Paris (75)	*		Bernard LABBÉ Vice-Chairman Town Councillor of Aulnay-sous-Bois (93)
*		Michel BULTE Vice-Chairman Councillor of Paris (75)	*		Pierre GATIGNON Vice-Chairman Councillor of Paris (75)	*		Gérard REY Vice-Chairman Councillor of Paris (75)			Jean-Philippe MALAYEUDE Deputy Mayor of Neuilly-Plaisance (93)
		Jeanne CHABAUD Councillor of Paris (75)	*		Brigitte KUSTER Councillor of Paris (75)			Pierre SCHAPIRA Deputy Mayor of Paris (75)	*		Claude PERNES Vice-Chairman Mayor of Rosny-sous-Bois (93)
*		Lyne COHEN-SOLAL Vice-Chairman Deputy Mayor of Paris (75)			Élisabeth LARRIEU Councillor of Paris (75)			Daniel BERNARD Deputy Mayor of Bagnolet (93)			Michel PRIN Deputy Mayor of Sevran (93)

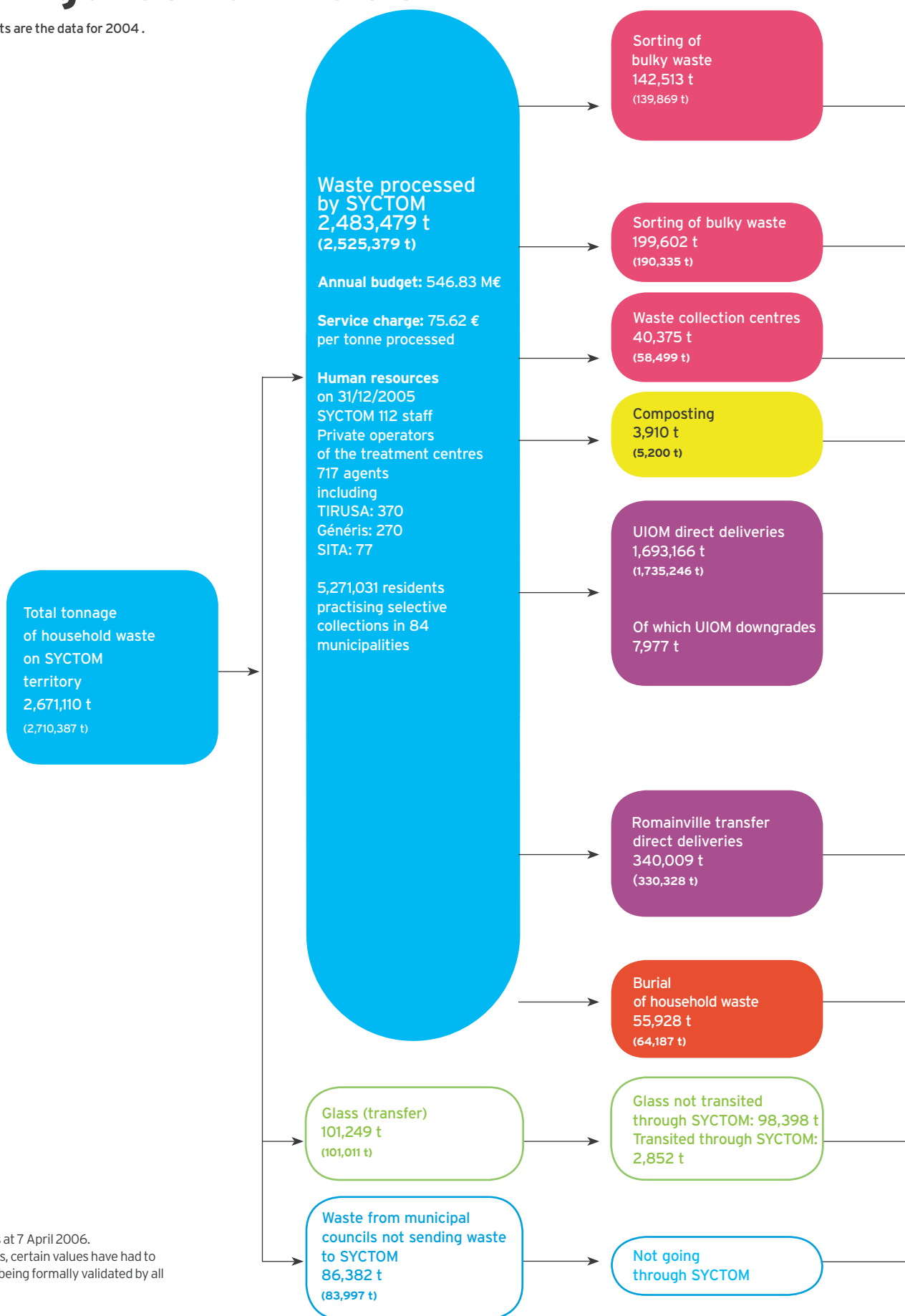
- Representatives of Paris City Council
- Delegates of SITOM93 (Seine-Saint-Denis)
- Delegates of SYELOM (Hauts-de-Seine)
- Delegates representing the local authorities in Val-de-Marne
- Delegates representing municipal councils of Yvelines

*		Henri REIN Deputy Mayor of Neuilly-sur-Marne (93)			Jean-Paul GAUDIN Town Councillor of Ville-d'Avray (92)	*		Alain AUDOUBERT Mayor of Vitry-sur-Seine (94)			Dominique PICARD Town Councillor of Saint-Mandé (94)
		Sylvain ROS Town Councillor of Aubervilliers (93)	*		Jacques GAUTIER Vice-Chairman Mayor of Garches (92)	*		Jean-Marie BRETILLON Mayor of Charenton-le-Pont (94)			Michel PRA Town Councillor of Gentilly (94)
*		Alain ROUAULT Vice-Chairman Deputy Mayor of Saint-Ouen (93)	*		Alain JULIARD Town Councillor of Boulogne-Billancourt (92)			Christian CAMBON Mayor of Saint-Maurice (94)			Jean-Michel SEUX Deputy Mayor of Vincennes (94)
*		Gérard SAVAT Vice-Chairman Deputy Mayor of Pantin (93)	*		Dominique LAFON Deputy Mayor of Fontenay-aux-Roses (92)			Séverine de COMPREIGNAC Deputy Mayor of Joinville-le-Pont (94)			Daniel TOUSSAINT Mayor of Valenton (94)
*		Jean-Pierre AUFFRET Vice-Chairman Deputy Mayor of Clichy-la-Garenne (92)	*		Hervé MARSEILLE Mayor of Meudon (92)	*		Pierre GOSNAT Vice-Chairman Maire d'Ivry-sur-Seine (94)			Gérard MEZZADRI Delegate of the community of communes of Grand Parc (78)
*		Christiane BAUDAT Deputy Mayor of Suresnes (92)	*		Olivier MERIOT Vice-Chairman Deputy Mayor of Gennevilliers (92)	*		Roger JOUBERT Vice-Chairman Town Councillor of Maisons-Alfort (94)			Guy RECHAGNIEUX Deputy Mayor of Chesnay (78)
		Christine BOURCET Deputy Mayor of Nanterre (92)			Jean-Loup METTON Mayor of Montrouge (92)	*		Jean-Yves LE BOUILLONNEC Senator-Mayor of Cachan (94)	*		Raymond ROUX Vice-Chairman Deputy Mayor of Vélizy-Villacoublay (78)
		Michel de LARDEMELLE Deputy Mayor of Levallois-Perret (92)	*		André SANTINI Vice-Chairman, Senator-Mayor of Issy-les-Moulineaux (92)			Jérôme LE GUILLOU Deputy Mayor of Kremlin-Bicêtre (94)			
		Éric FLAMAND Deputy Mayor of Vauclercsion (92)	*		Hervé SOULIÉ Deputy Mayor of Saint-Cloud (92)			Franck PERILLAT Deputy Mayor of Villejuif (94)			

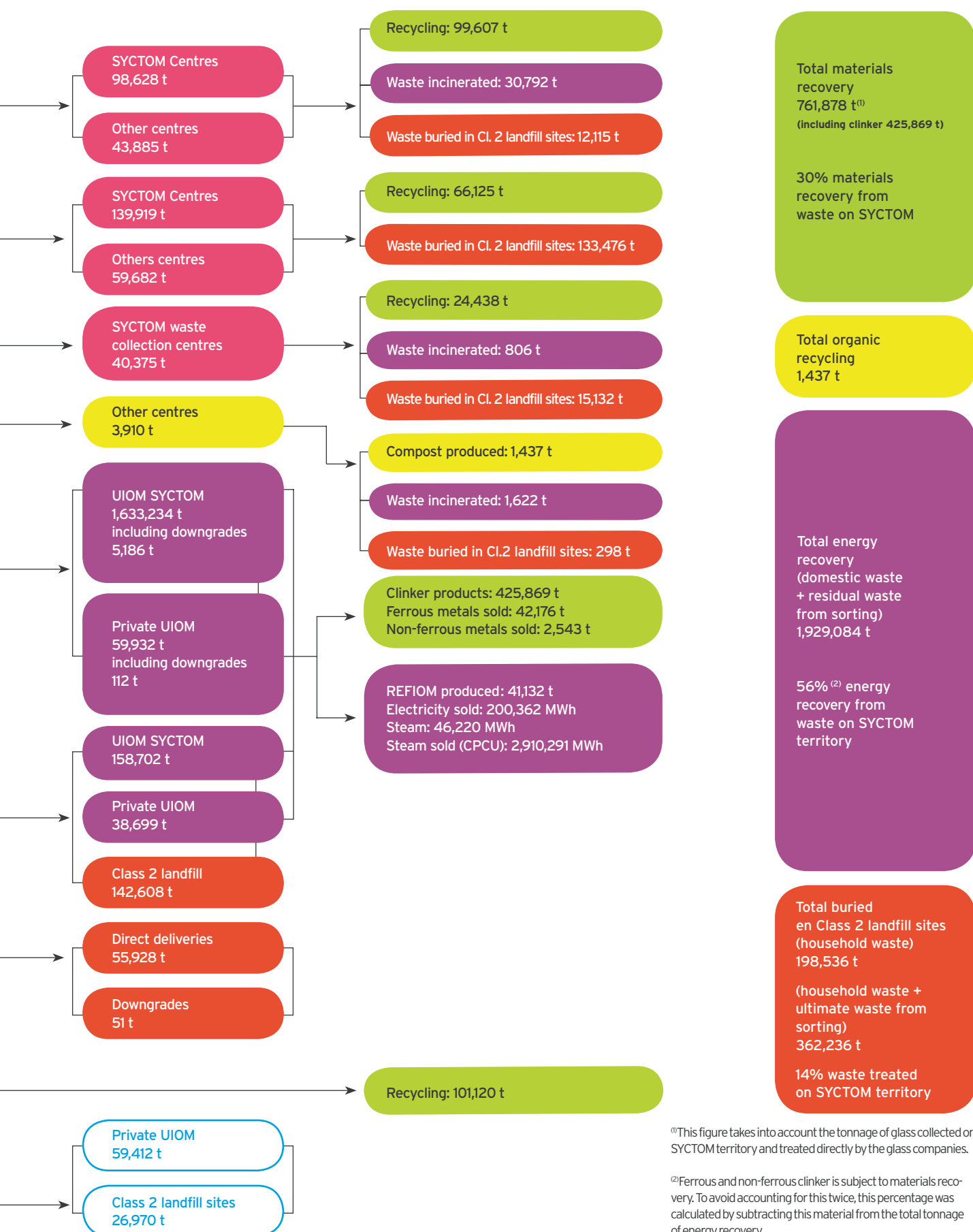
* Members of the committee in 2005

> Key figures for 2005*

The figures in brackets are the data for 2004.



* These are figures as at 7 April 2006.
Given time restrictions, certain values have had to be published without being formally validated by all SYCTOM partners.



⁽¹⁾This figure takes into account the tonnage of glass collected on SYCTOM territory and treated directly by the glass companies.

⁽²⁾Ferrous and non-ferrous clinker is subject to materials recovery. To avoid accounting for this twice, this percentage was calculated by subtracting this material from the total tonnage of energy recovery.

> Annual report on the cost and quality of the public waste elimination service

(in application of decree n° 2000-404 of 11 May 2000) - Technical and financial indicators for 2005

Number of councils in SYCTOM area	Number of residents in SYCTOM area	Tonnages (gross) of waste			
		Household waste, sweepings green waste	Bulky items	NH/W	
85 member councils + 4 councils under temporary management agreements until 30 June 2005 and 85 councils from 1 July 2005	5,282,604 in 85 boroughs	2,100,273,67 t i.e. 397.6 kg/res./year	199,602 t i.e. 37.8 kg/res./an	716.33 t	

Processing centres and location

Location of SYCTOM processing centres:

- **3 HWIU** at Issy-les-Moulineaux (capacity: 540,000 t, quantities 2005: 553,147 t), Ivry-sur-Seine (capacity: 730,000 t, quantities 2005: 654,312 t), Saint-Ouen (capacity: 630,000 t, quantities in 2005: 650,479 t),
- **3 Selective collection sorting centres** at Nanterre (capacity: 30,000 t, quantities 2005: 26,697 t), Ivry-sur-Seine (capacity: 30,000 t, quantities in 2005: 31,534 t), Romainville (capacity: 45,000 t, quantities in 2005: 40,397 t),
- **2 bulky waste sorting centres** at Saint-Denis (capacity: 60,000 t, quantities in 2005: 63,411 t), at Romainville (capacity: 75,000 t, quantities in 2005: 76,509 t),
- **1 transfer centre** at Romainville (capacity: 350,000 t, quantities in 2005: 340,009 t),
- **3 waste collection centres** at Ivry-sur-Seine (quantities 2005: 5,160 t), Saint-Denis (quantities 2005: 8,445 t), Romainville (quantities 2005: 26,770 t)

Waste processing

Operation organisation of waste elimination service entrusted to SYCTOM of the Paris urban area

Total annual expenditure for waste management for SYCTOM (total real expenditure operations section of administrative accounts 2005)

Source of financing global waste processing service

Basis for calculating special service charge for elimination of similar materials

Annual total of main paid services under contract in M€ (tax inc.):

TIRUSA: 74.2M€(HWIU) - GENERIS: 28.0M€ (26.3M€ HWIU and 1.7M€ sorting) - REP: 25.1M€ (landfill) - SITA: 12.8M€ (landfill) - SITA: 10.1M€ (sorting) - NOVERGIE: 6M€ (HWIU) - YPREMA: 3.2M€ (clinker) - MRF: 3.0 M€ (clinker) - VALOR INDUSTRIES: 3.0 M€ (sorting) - NICOLLIN: 2.0M€ (sorting) - SARM/REP: 1.7M€ (landfill) - REVIVAL: 1.4M€ (sorting) - SIEVD: 1.3M€ (0.7 M€ sorting and 0.6 M€ HWIU) - SITAIDF/NICOLLIN: 0.7 M€ (sorting) - CURMA: 0.3 M€ (HWIU).

Overall cost of waste removed, of bulky waste elimination service (elimination or storage) including transport and burial in landfill sites of sorting rejects

Products from admission fees at processing and storage centres where the municipal council is owner for related wastes

Sums paid back in support of selective collection

Itemised amounts of aid received from approved bodies: support by tonne sorted

Processing/recovery

Incineration-derived recovery:
Electricity: 200,362 MWh, steam: 2,956,511 MWh,
clinker: 425,869 t, ferrous metals sold: 42,176 t,
non-ferrous metals sold: 2,543 t

Recovery from selective collections:
99,607 t plastics, papers/cardboard,
newspapers and magazines, steel and aluminium

Bulky waste recovery:
66,125 t wood, scrap metal, large format cardboard

- **Materials recovery from sorting centres in € (ex tax):** JNewspapers/magazines (3.95 M€) - Plastics (0.91 M€) - Cardboard RP (0.74 M€) - Industrial paper (0.32 M€) - Ferrous (0.14 M€) - Commercial cardboard (0.11 M€) - Office paper (0.023 M€) - Aluminium (0.01 M€) - Glass (0.01 M€) - Non-ferrous (0.005 M€),
- **HWIU energy recovery at ISSY1 on direct sale SYCTOM in Meuros (ex tax):** Scrap metals (0.99 M€) - Aluminium clinker (0.43 M€) - Large scrap metal items and others (0.06 M€)

HWIU energy recovery at ISSY1 on direct sale SYCTOM in M€ (ex tax): Steam (9.13 M€) - Electricity (2.05 M€)

Measures taken during the year for prevention or alleviation of harmful effects on human health and the environment: continuation of works to bring the 2 HWIUs at Ivry Paris XIII and Saint-Ouen into conformity with ministerial order of 20 September 2002

Selective collections			Redevances		
Newspaper/magazines, multi-materials, papers-cardboard	Glass	Waste collection centre	Share population	Share tonnage	
142,513 t i.e. 26.97 kg/res./year	2,852 t	40,375 t	€ 5.92	€ 75.62	

Location of private units used by SYCTOM and tonnages processed in 2005:

- **HWIU** at Massy (Curma) 3,756 t, Rungis (Généris) 4,974 t, Argenteuil (Novergie) 48,615 t, Saint-Thibault-des-Vignes (Novergie) 26,055 t, Monthyon (Généris) 4,707 t, Saint-Ouen-l'Aumône (Généris) 11,176 t,
- **Sorting centres** at Arcueil (SITA) 33,090 t Bulky Waste, Ivry-sur-Seine (Revival) 16,038 t BW, Ivry-sur-Seine (Valor) 11,083 t Selective Collections, Gennevilliers (SITA) 11,660 t SC, Buc (Nicollin) 10,554 t BW and 6,982 t SC, Chelles (Généris) 8,247 t SC, Rungis (SIEVD) 5,390 t SC, Châtillon (Généris) 88 t SC, Châtillon (Taïs) 325 t SC, Nanterre (Taïs) 41 t SC, La Courneuve (Taïs) 68 t SC,
- **Composting unit** at Triel-sur-Seine (Généris) 3,910 t,
- **LANDFILL CENTRES**: Class 1 landfill at Villeparisis (SITA FD) 38,642 t Refiom, Class 2 at Isles-les-Meldeuses (Capoulade) 387 t, Class 2 at Claye-Souilly (REP) 299,938 t, Class 2 at Saint-Thibault-des-Vignes (Novergie) 2,164 t, Class 3 at Claye-Souilly (REP) 50,376 t, other storage in landfills other than SYCTOM units 59,649 t.

Procurement contracts

€ 244,067,255

Contribution by local authorities, aids from Éco-Emballages for selective collection, sales of products

Not applicable

163.8 M€

97.40 € per tonne

Not applicable

45.73 €/t multi-mat. without glass, newspapers/magazines, office papers, 30.49 €/t multi-mat. with glass, 30.93€/t re-sorted SC, repayment service charge 75.62€/t from SC

11.34 M€

Recovery in waste
processing sites:
24,438 t

Recovery in
composting unit :
1,437 t

Class 2 landfill:
362,236 t

Total receipts energy and materials recovery: 7.6 M€ (ex tax)

Total receipts energy recovery: 11.18 M€ (ex tax)



Public and private partners.

State services and public bodies, local authorities and private companies all work in liaison and help SYCTOM to accomplish its missions:

- **the European Union** defines the key objectives for waste treatment and environmental protection by means of directives which are transposed into national law by the State.
- **the Ministry of Ecology and Sustainable Development** sets the main principles governing waste management and the standards that must be complied with according to the European directives. It also determines the financial resources of Ademe and grants consent to the bodies in charge of managing the organisations recycling sorted recoverable packaging.
- The French Environment and Energy Agency **Ademe** (Agence de l'environnement et de la maîtrise de l'énergie) is a public body, under joint supervision of the Ministries of Ecology, Industry and Research. Its mission in this sector is to help local authorities set up systems for waste management. In 2005, Ademe provided support for 600 operations carried out by local authorities for a total amount of 18 million euros (investment aids).
- The **chief constables** deliver the permits to operate the waste processing centres. Moreover, they decide on the composition and chair the CLISs (Local Commission for Information and Surveillance) set up by them for the supervision of activities in the energy recovery centres present in their department.
- **The Region** is an essential partner for SYCTOM. The law of 13 August 2004 concerning local liberties and responsibilities provides for the production of a regional waste elimination plan covering the Ile-de-France region, and was drawn up on the initiative and under the responsibility of the Chairman of the Regional Council. The Region contributes to SYCTOM's investments as part of the contract called "Terres Vives", with which Ademe is also associated. The overall support arranged in this contract amounts to 9.27 million euros for 2005.
- **The Department Councils** (Conseils généraux) who, together with the Prefectures, drafted, or took part in the drafting of, the departmental plans for elimination of household waste, ensuring its supervision right through to the application of the regional plan.
- **SYELOM and SITOM93** are two member primary syndicates that take the actions of SYCTOM in the Hauts-de-Seine and Seine-Saint-Denis departments. They ensure associated actions (network of waste collection sites). For their members, they play the role of information and coordination centre as well as aiding with decisions and supervision of selective and specific collections.
- **Éco-Emballages**, is a company operating under private company law, approved by the State, which assists and supports the setting up and development of systems of selective collections, sorting, recycling and energy recovery concerning household packaging, as laid out in the new schedule D contract. It receives a financial contribution from companies that manufacture and sell packaged products for domestic consumers. SYCTOM received 11.3 Meuros from Éco-Emballages in 2005.
- **The company UPM-Chapelle Darblay, on a contract with SYCTOM** since 1995, buys back for a guaranteed price newspapers and magazines sorted in all the centres operated by or on behalf of the Syndicate. Other companies taking back materials emanating from the recycling of waste are TIRFER for steel, ALCAN for aluminium and SITA for plastics.
- **The companies CPCU and EDF** buy steam and electricity produced by SYCTOM's three household waste incineration units. In 2005, SYCTOM sold 2,910,291 MWh of steam and 200,362 MWh electricity, for an overall sum of 51.2 million euros.
- All the Syndicates centres are run by private companies retained following a procedure calling for tenders: **TIRU** operates the three energy production centres; **Généris** operates the sorting centres at Romainville, Saint-Denis and Nanterre; since 2005 **SITA** has been operating the sorting centre at Ivry-Paris XIII.
- SYCTOM also calls on other private operators: **SITA** operates the selective collection sorting centres at Arcueil and Gennevilliers as well as the Class 1 landfill centre at Villeparisis; **Généris** operates the sorting centres at Chatillon and Chelles and Nicollin the centre at Buc, Valor Industries and Revival those at Ivry, Taïs operates the sorting centres at Chatillon, Nanterre and La Courneuve and **SIEVD** the sorting centre at Rungis. The company **Novergie** operates energy recovery centres used by the Syndicate at Argenteuil and Saint-Thibault-des-Vignes.
- Lastly, three companies buy clinker from SYCTOM's energy recovery centres: **the companies Jean Lefèbvre, TIRU et YPREMA.**

Glossary

Voluntary drop-off

Method of selective collection consisting of taking materials sorted for recycling and placing them in the appropriate containers situated in public places (this is often the case with the collection of glass).

Biogas

Gas produced by the degradation of organic matter, in the absence of air. Similar to fossil gases used as energy sources, its components are essentially methane and carbon dioxide.

Fly ash

Fine ash produced during waste incineration and contained in the gases liberated from the heating furnace exit. They are captured in an electrofilter along with dust at the first level of incineration smoke treatment or scrubbing.

Cogeneration

Production of steam and electricity from heat produced by waste combustion.

Selective collection

Collection of waste already sorted for recycling purposes by the users (packaging, newspapers/magazines, glass).

Electrical and electronic waste (e-waste)

Waste from equipment that is operated by electrical current or electromagnetic fields, that is to say, all equipment that operates with an electrical plug, a battery or a rechargeable battery. The ministerial decree of 20 July 2005 makes selective collection and processing of electrical and electronic waste compulsory.

Non-hazardous industrial waste (NHIW)

Waste resulting from industries that can be processed in the same installations as household waste.

Residual waste

Non-recoverable wastes, residues from waste processing "which are no longer able to be treated under the current technical and economic conditions, notably by extraction of the recoverable part or by reduction of their polluting or hazardous nature" (law of July 13th 1992).

Dioxins

Generic name for a family of toxic compounds which belong to the halogenated polycyclic aromatic hydrocarbons (HPAHs). They are made up of atoms of carbon, hydrogen, oxygen and halogens (chlorine, bromine, iodine, fluorine).

EMR

Food cartons in fine light cardboard (cake boxes, external packaging of yoghurts etc.)

LFC (ELA)

Packaging for food liquids such as cartons for milk or fruit juice.

Bulky items (waste)

Household waste too large to put in the bin (electrical appliances, furniture, mattresses etc.).

Incineration

Waste processing method by burning that generates three kinds of residue: clinker, ash and smoke-scrubbing residues.

Classified installations

Installations that can be the source of hazards or pollution and whose use is regulated. Two types of such site are distinguished: those depending on a declaration of the Prefecture and those subject to permission from the Prefecture after a public inquiry, as is the case for waste processing facilities.

Leachates

Waters which percolate through waste stored on a site and become

charged with bacteria and chemically-loaded substances. They are pollutants and must be treated before possible ejection into the natural system.

Clinker or slag

Non-combustible residues produced in the incineration furnace. After maturation, they are used in road works.

Heavy metals

Metals which are hazardous for human health if allowed to accumulate in the environment. They include lead, cadmium and mercury.

Methanization

A process which activates the production of biogas by controlled anaerobic degradation of organic waste. It is an energy source that can be recovered and used by burning.

PEHD(high-density polyethylene)

Opaque plastic material used in the manufacture of packaging such as flasks for household products and recyclable as pipes and hoses, shoe stiffeners, canisters etc.

PET (polyethylene terephthalate)

Plastic material used in particular in the manufacture of transparent bottles (water, drinks). It is recyclable as new bottles, containers, textiles, filling for quilts, pillows, anoraks and soft toys.

Residues from smoke scrubbing after household waste incineration (REFIOM)

Residues from household waste incineration plants which carry the residues from dust removal and smoke scrubbing. They undergo stabilization before being deposited at Class 1 landfill centres.

Sorting rejects (undesirables)

Packaging in the sorting centre that is too soiled or materials unsuitable for recovery for recycling. This is extracted by the sorters of materials sent to the recycling centres.

TOE (tonne of oil equivalent)

Measure that allows inter-comparison of types of energy by reference to oil. Example: 1,200 l fuel oil = 1 TOE.

HWIU

Household waste incineration units.

Recovery

This consists in rendering waste material valuable by reuse of the product (deposit), recycling, composting, regeneration (production of a new raw material) or in the form of energy.

Energy recovery (EfW)

Recovery of energy by using the calories contained in the waste by burning to capture the energy in the form of heat, steam or electricity (Energy from Waste).

Materials recovery

Recovering a value for waste by using its constituent materials, like the reconstitution of used oil, recycling of newspapers and magazines and packaging material.

Organic materials recovery

Recovery of green and organic waste for reuse, for example in composting.



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