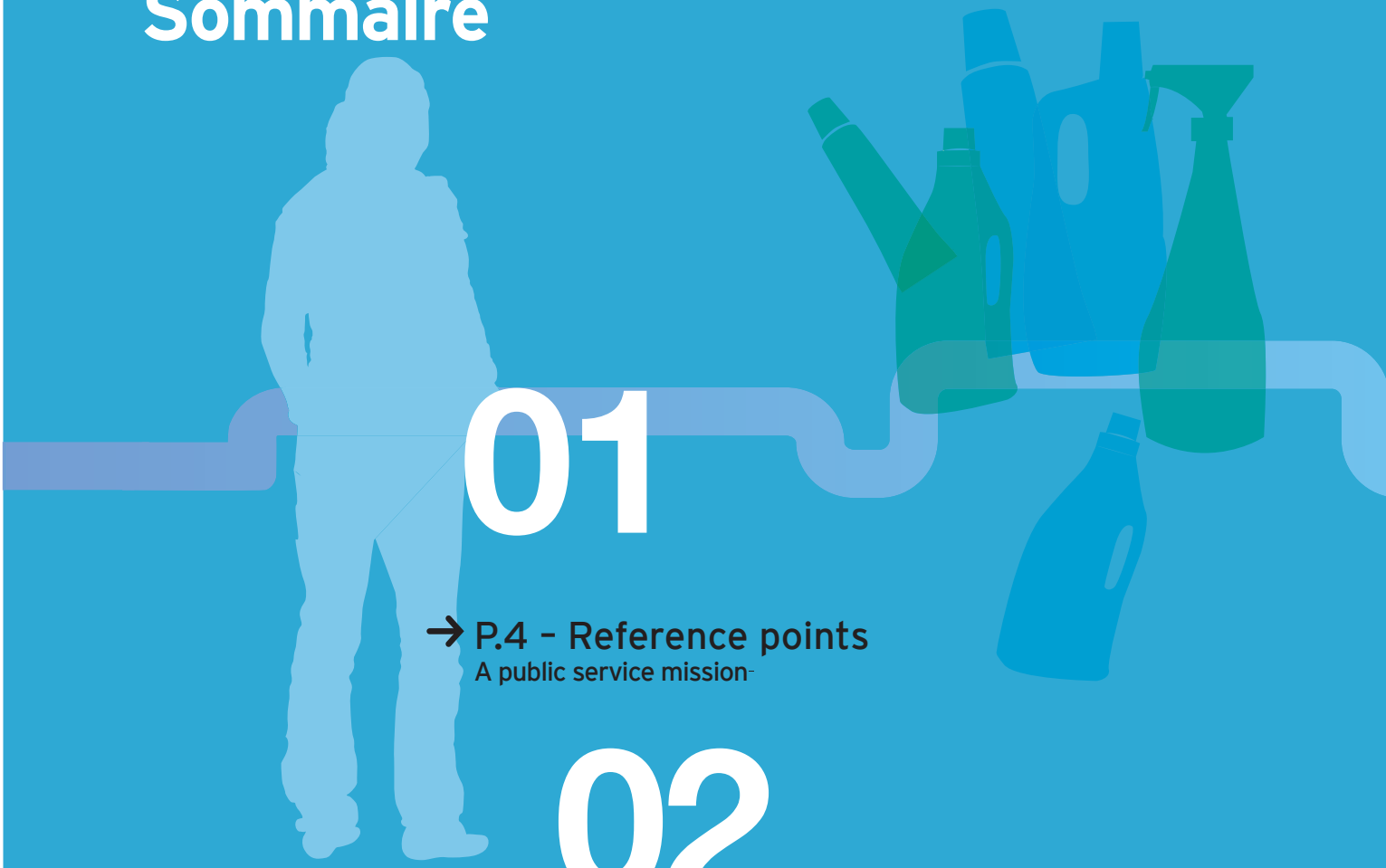
Activity report 2006

SYCTOM
DE L'AGGLOMERATION PARISIENNE

Sommaire



"2006 was an extraordinary year in so many ways, and we honoured the commitments we made"

Anticipation: February 2006 saw the closure of the Issy 1plant and its conversion into a temporary transfer centre until the Isséane centre comes into service, which is scheduled for summer 2007, after a two-month winter requisition by the prefect in order to guarantee urban heating continuity in the sector. Cost overrun did not exceed expected levels, with the regular increase of the annual repayment decided in 2001.

Innovation: our two Seine-Saint-Denis bio-methanization treatment centres were launched following the sorting of 400,000 tonnes of household waste, one in Romainville/Bobigny as a replacement for the existing transfer centre, the other in Blanc-Mesnil/Aulnay-sous-Bois in an innovative partnership with SIAAP. This additional capacity bears witness to the increasingly diverse range of household waste recycling methods employed by SYCTOM.

Prevention: We made significant progress in our environmental protection initiatives: we maintained atmospheric emissions from our Ivry and Saint-Ouen energy recovery centres below regulatory thresholds thanks to new smoke processing systems; we developed alternatives to road transport with increased tonnages being transported by waterway; there was a regular increase in material recovery from selective collections and greater efficiency in the sorting process; and waste prevention campaigns at source, with high uptake in our member authorities and our two primary syndicates.

Transparency: This activity report outlines all these directions. It is part of SYCTOM's constant efforts to provide complete transparency with regard to its activity and to inform our fellow citizens about the challenges involved in our public service mission.

François DAGNAUD,
Chairman of SYCTOM in the Paris agglomeration

Reference points

01

A public service mission

85 local authorities working together to process household waste

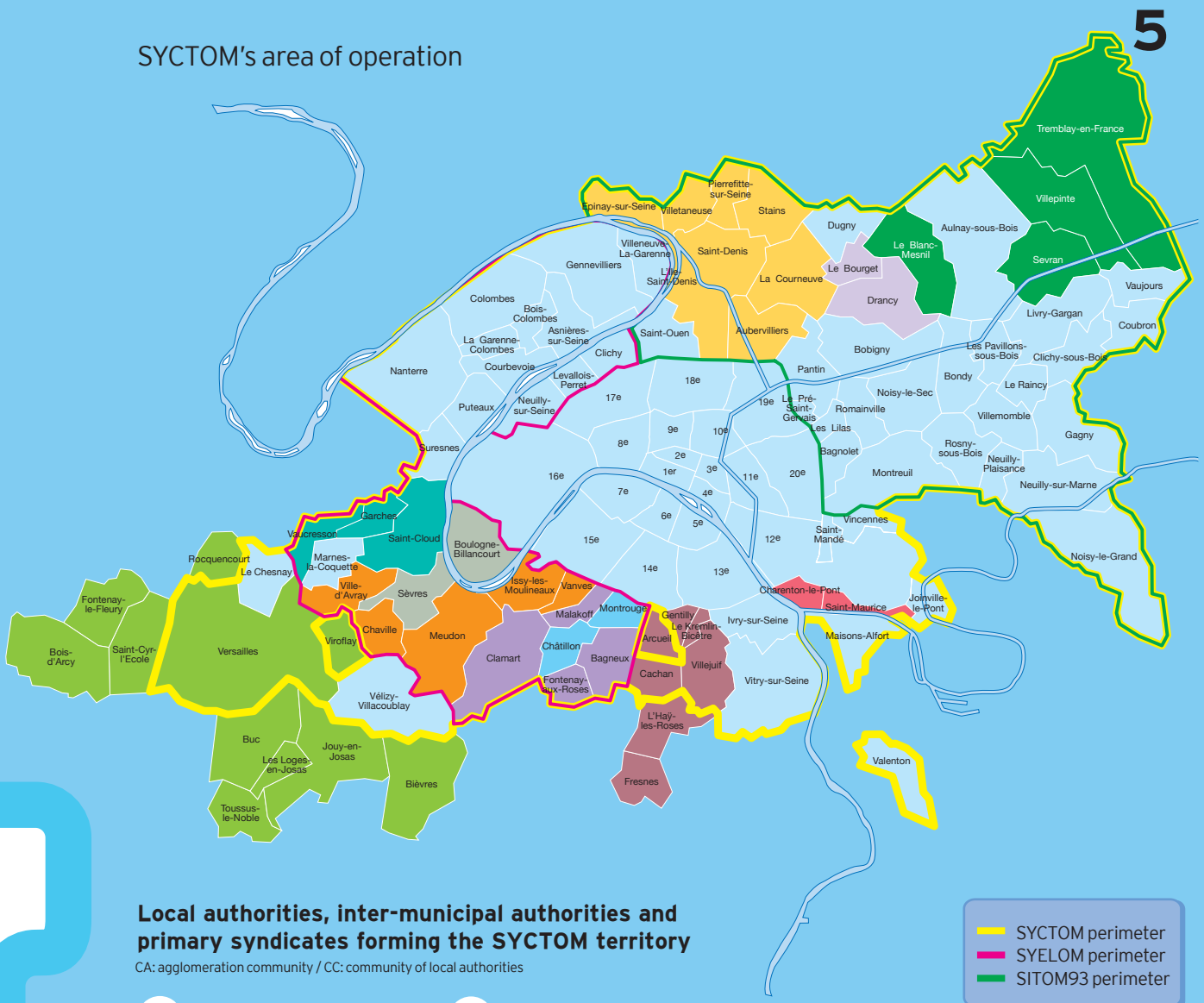
After decentralisation in 1984, 60 local authorities came together in an inter-authority group to process their household waste together. This group gave rise to the biggest European waste processing and recovery group: SYCTOM, (inter-communal household waste management group) in the Paris agglomeration. It has a public service mission.
In 2006 it processed 2.49 million tonnes of house-hold waste produced by 5.48 million inhabitants, which accounts for 50% of the population of the Ile-de-France region and 9% of the French population. Each resident of the region throws away an average of 484kg of waste, compared with the national average of 454kg a year.
*Source Ademe-Ifen 2002.

The members of SYCTOM

The 85 local authorities which now belong to SYCTOM are members:
› **either through the primary syndicates**, SITOM93 and SYELOM, which was created before SYCTOM:
- SITOM93 (Seine-Saint-Denis inter-authority waste management group) brings together 38 Seine-Saint-Denis authorities (24 of which are direct members and 14 through 3 inter-municipal groupings),

- SYELOM (Hauts-de-Seine combined group for the disposal of household waste) brings together 30 Hauts-de-Seine authorities (14 direct members and 16 through 5 inter-municipal groupings). These two primary syndicates are important partners for SYCTOM. They provide information to their members, help them to make decisions and monitor their selective collections. They delegate to SYCTOM the responsibility to process and recover waste;
› **or directly.** This is the case for the City of Paris, for 3 Yvelines authorities and for 13 Val-de-Marne authorities, making 17 direct member authorities (10 authorities which are direct members and 7 through 3 inter-municipal groupings).
SYCTOM is a public administration establishment under the Local and Regional Authority Code (CGCT) The Union committee operates according to the Municipal Executive model.

SYCTOM's area of operation



Local authorities, inter-municipal authorities and primary syndicates forming the SYCTOM territory

CA: agglomeration community / CC: community of local authorities

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

- SYCTOM perimeter
- SYELOM perimeter
- SITOM93 perimeter

*This inter-municipal authority has been responsible for waste collection since 21 December 2006.

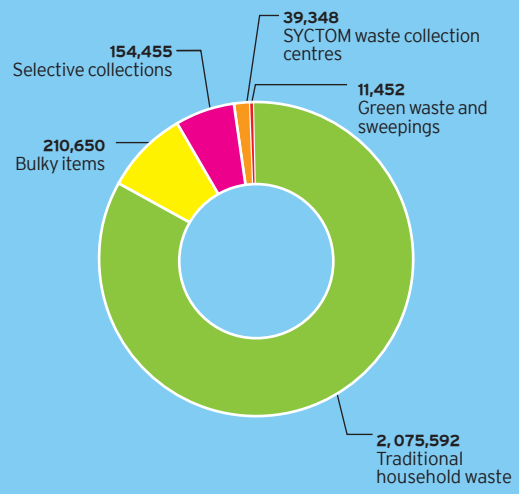
5,48 million inhabitants
in the SYCTOM district in 2006.

85 local authorities
in 5 Ile-de-France departments,
11 inter-municipal authorities and 2 primary syndicates.

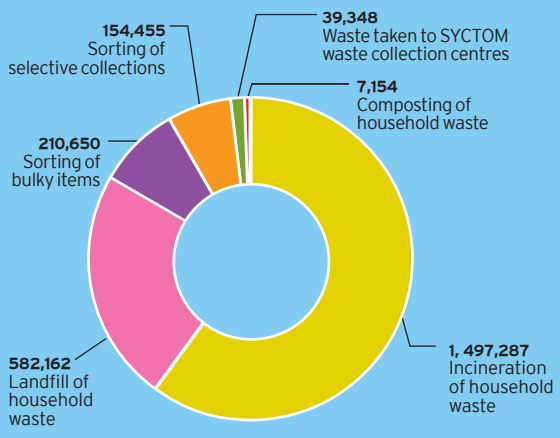
2,49 million tons of waste
processed by SYCTOM in 2006
(out of 2.65 million tonnes of waste collected in the district including non-participating authorities and glass, which is not processed by SYCTOM).

Breakdown of the 2.49 million tonnes of waste processed by SYCTOM

By collection method
(in tonnes)



By processing method
(in tonnes)



Five sources of waste

The waste collected by SYCTOM in its member local and inter-municipal authorities comes from five different sources:

Traditional household waste collections

This covers non-recyclable mixed household waste (food leftovers, dirty waste, etc) which users throw out into their bins. It is taken to SYCTOM's centres for incineration with energy recovery, where it is burnt to produce energy (electricity and steam for the urban heating network).

Selective collections

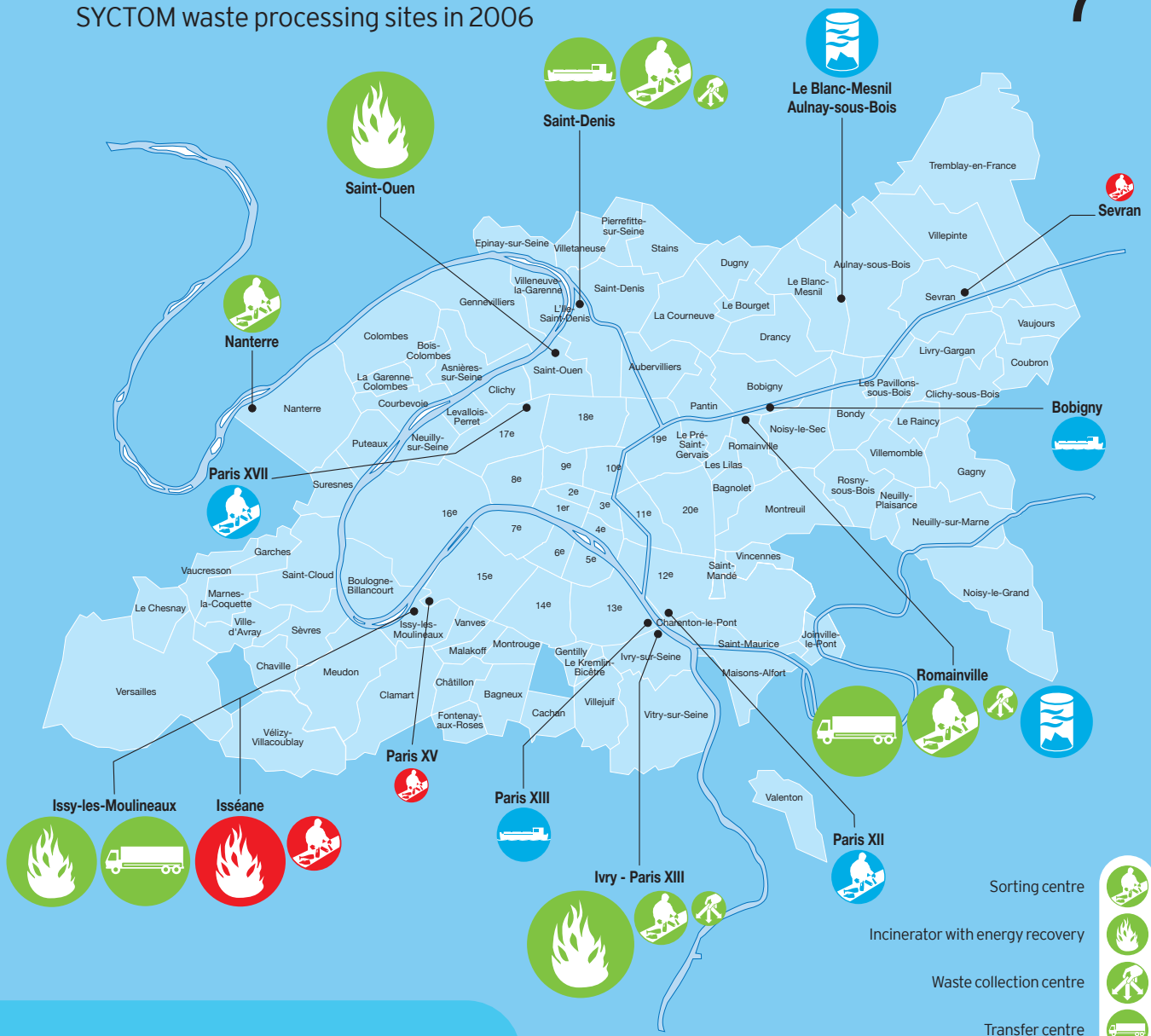
This covers recyclable waste which users sort and dispose of in specific bins: newspapers and magazines, cardboard packaging, plastic bottles and containers, brick packs, steel and aluminium cans, and glass bottles and jars.

The glass is immediately collected by glassworkers and so is not processed by SYCTOM centres. The other waste is sorted by material type in SYCTOM waste sorting centres then collected by recycling firms for material recovery, thus giving the materials a second life.

Bulky items

These products of domestic household life include used items of furniture, mattresses or household domestic appliances. The latter category, which is part of electrical and electronic waste (e-waste), is now subject to specific regulations which have brought into being reuse and recovery channels which are specific to this category of waste. Bulky items are covered by specific collections and sent to specialist SYCTOM sorting centres, where their component materials are recovered.

SYCTOM waste processing sites in 2006



Sorting centre

Incinerator with energy recovery

Waste collection centre

Transfer centre

River transfer centre

Sorting centre under construction

Energy recovery unit under construction

Planned methanization unit

Planned selective collection sorting centres

Planned river transfer centre

Issy-les-Moulineaux
This incinerator centre was in operation until February 22th 2006 because it was requisitioned by the State to ensure continuity of urban heating. Since February 23 th, it has been converted into a temporary waste transfer unit. It will fulfil this function until the Isséane plant comes into service.

501,000 to 730,000t
251,000 to 500,000t
61,000 to 250,000t
31,000 to 60,000t
16,000 to 30,000t
0 to 15,000t

Scale in proportion to each centre's annual processing capacity.

Waste brought to the processing site

This includes both bulky items, e-waste, special household waste (batteries, solvents, drain oil) and miscellaneous waste (rubble, wood, etc) which cannot be collected with household waste or in selective collections because of its weight, volume or toxicity. Placed in separate containers, some of this waste is recycled, and some treated, incinerated or sent to landfill centres.

Green waste

This comes from garden maintenance and green spaces, and includes lawn clippings, leaves, branches, etc. It is collected by local authorities or taken to the processing sites.

Strategy

In 2006, SYCTOM pursued its sustainable environmental protection policy on several fronts: waste prevention, reduction of sources of pollution and noxious agents, helping to combat the greenhouse effect, extending waste sorting and recovery capacity, increased use of alternative forms of transport and development of the methanization sector.

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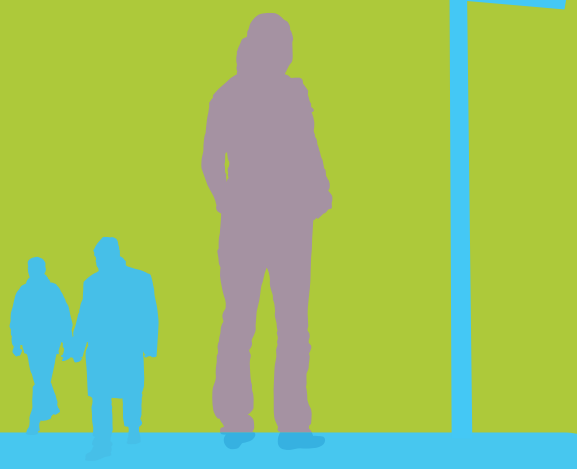
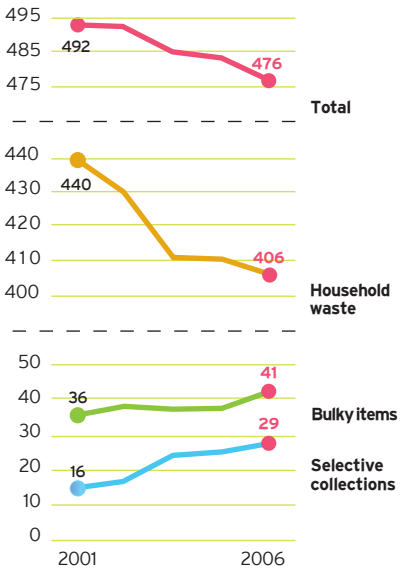


Towards sustainable environmental protection

Waste prevention and recovery plan

Less waste, more recycling

Less waste processed by SYCTOM since 2001
(in kg/person/year)



Changes observed inside a constant perimeter made up of 76 local authorities and 5.05 million inhabitants.

In October 2004, SYCTOM launched a plan to prevent and reduce waste sent for incineration or to landfill. By 2010 the objective is to achieve an annual reduction of 300,000 tonnes of household waste processed in incinerators or waste facilities by increasing methanization, materials recovery and waste prevention.

In order to achieve this objective, the plan focuses on two key areas:
- changing all actors' behaviour (inhabitants, administrations, companies) in terms of their consumption of natural resources and preservation of the environment;

- improving the recovery of waste and diversifying the methods of waste processing.

This plan, which has been in force for two years, has had an impact in the authorities which are members of the Syndicate. The results are encouraging.

Lower tonnages processed

The zone examined (with a constant perimeter) has a population of 5.05 million people (INSEE, 1999) and concerns the period 2001-2006. The total tonnages received by SYCTOM fell by 3% in five years, going from 492kg per inhabitant in 2001 to 476kg in 2006, accounting for a reduction of more than 70,000 tonnes of waste. In the area of household waste, this reduction is greater still (8%) and constant. The quantities incinerated or placed in landfill fell by more than 175,000 tonnes.

High growth in selective collections

The proportion of selective collections increased to reach an average of 29kg per year per person, which is an increase of 13kg per person compared with the period 2001-2006. In 2006, these collections increased by nearly 10%, and they are set to rise by 5% in 2007. However, the results vary from authority to authority: from less than 20kg per year per person to more than 45kg. In order to encourage authorities to collect more recyclable waste, SYCTOM decided to offer a subsidy of €125.89 per tonne of office paper and cardboard placed in single material collections (following the same principle as its support for selective collections). This waste is also accepted as part of multi-material household collections.

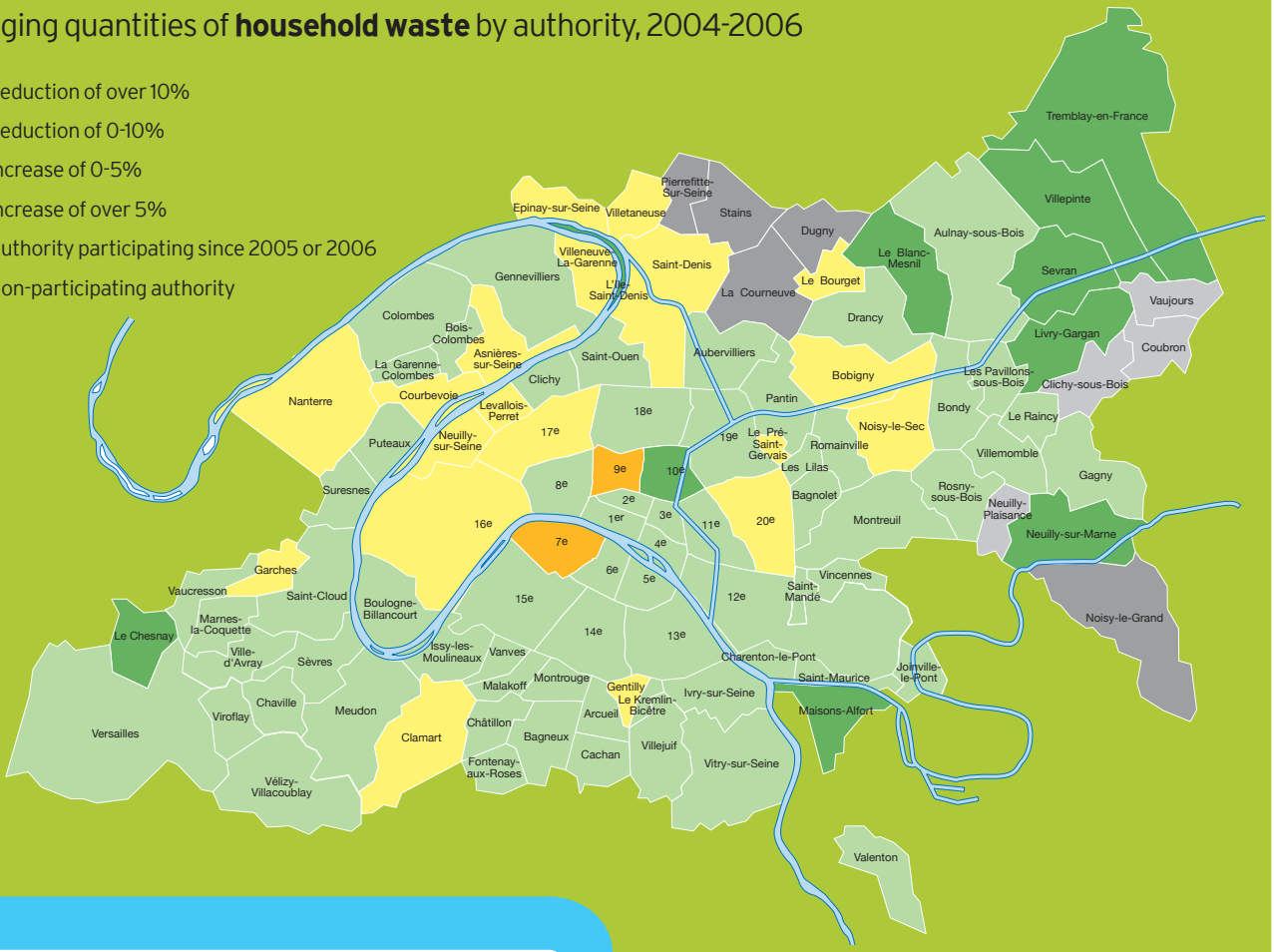
...

Changing quantities received in **selective collections** by local authority, 2004-2006

- Reduction of over 10%
- Reduction of 0-10%
- Increase of 0-10%
- Increase of 10-50%
- Increase of over 50%
- Authority participating since 2006

Changing quantities of **household waste** by authority, 2004-2006

- Reduction of over 10%
- Reduction of 0-10%
- Increase of 0-5%
- Increase of over 5%
- Authority participating since 2005 or 2006
- Non-participating authority



The campaign to promote e-waste collections displayed on street furniture in local authorities. (The advert reads: "I buy a new one... and they take the old one")

More neighbourhood reception units

In partnership with the Île-de-france regional authority, SYCTOM supported five local authority or inter-municipal authority waste reception projects in Gennevilliers, Pierrefitte, Sevran, Tremblay-en-France and Villepinte, contributing a total of €384,000 in subsidies. In order to further the development of these neighbourhood waste reception centres, SYCTOM is subsidising their creation, providing 30% of civil engineering and equipment costs.

Support for the distribution of reusable carrier bags

In order to reduce the number of single-use plastic bags given out at checkouts, SYCTOM is providing financial aid to member local authorities which produce, distribute and use reusable carrier bags (€0.20 per bag). To date, seven local authorities have received this assistance and have distributed, free of charge, 395,042 reusable carrier bags to their residents (Bagnolet, Gennevilliers, Neuilly-Plaisance, Paris, Rosny-sous-Bois, Saint-Mandé and Vincennes).
This initiative precedes the total ban on non-biodegradable plastic bags, which will come into force in 2010 (law passed on 5 January 2006).

"One for one" for e-waste (Electrical and Electronic Waste)

In order to raise awareness of the "one for one" collection system, at the end of 2006, SYCTOM launched a major communication campaign entitled "I buy a new one and they take the old one» in partnership with its member local authorities, almost all of which took part in the initiative, displaying the poster in street furniture or public buildings, or using other media (adverts and articles in the municipal magazine, billboards). Some local authorities plan to operate a specific e-waste collection or to collect them at waste collection centres within their districts, having reached an agreement with an environmental body. In the towns in Hauts-de-Seine, this initiative is the responsibility of SYELOM. Furthermore, two SYCTOM waste collection centres (in Ivry-sur-Seine and Romainville) collect this waste and transfer it along the dedicated channels.

Improving the collection and recovery of used textiles

In 2006, SYCTOM reached agreements with two used textile collection/recycling actors: the Le Relais association, which distributes containers to 53 local authorities, and the Ecotextile company, which has distributed containers to 10 local authorities.
The objective is to improve the recovery of used textiles. The actors in this channel have therefore pledged to recycle a proportion of the textiles collected (50-80% depending on the statutes of the company). In return, SYCTOM exempts them from part of the waste processing cost (up to 15% of tonnages). These partnerships have led to the recovery of more than 3,900 tonnes of textiles (559 tonnes of which waste was processed for energy recovery by SYCTOM).
Finally, the Syndicate renewed its support for the Emmaüs Community: it processed its sorting rejects, bulky items and used textiles free of charge (1000 tonnes per year).

New e-waste legislation

Since 2003, the collection and recovery of electronic and electrical equipment has been regulated in the European Union. These goods can no longer be thrown away. The objective is to reduce pollution and maximise the recycling of e-waste.
The new initiative provides for the collection of an old device when a new one of the same type is bought: the "one for one" scheme. Once collected, the distributors send the appliances to be recycled at specialist facilities.
The stakes are high: the volume of e-waste is growing by 4% a year, faster than average for general waste. France has set itself the objective of collecting 4kg of e-waste per person per year.

Reducing greenhouse gases (GHGs) and pollution

Saving natural resources and combating global warming

Incinerating household waste with energy recovery reduces CO 2 emissions by substituting for the burning of fossil fuels (gas, oil and coal). Ademe, the French Agency for the Environment and Energy Management) estimates the positive impact on global warming at a reduction of 250 tonnes of CO2 for every 1000 tonnes of household waste incinerated. The same waste, placed in landfill without capturing biogas, would produce up to the equivalent of 1500 tonnes of CO2. In a highly urbanised environment, the incineration of household waste with energy recovery is the most satisfying solution from an environmental perspective for dealing with non-recyclable waste. SYCTOM processes most of the waste from the Paris agglomeration in this way. The energy produced is used, for example, to heat housing and public facilities, and avoids using non-renewable fossil fuels.
The energy produced in the three energy recovery plants avoids the consumption of the equivalent of 300,000 tonnes of oil and heats the equivalent of 300,000 homes. It avoids the emission of 900,000 tonnes of CO 2 by comparison with fossil fuels.

Another source of GHG reductions: methanization. This decomposition process uses the fermentable proportion extracted from household waste to produce biogas, which, once captured, can be transformed into electricity, heat or biofuel. It thus helps to reduce greenhouse gas emissions and to preserve fossil fuel resources. SYCTOM is currently developing two bio-methanization treatment plants in Seine-Saint-Denis, which are scheduled to become operational in 2012. They will allow the fermentable proportion of more than 400,000 tonnes of household waste and slurry to be methanised.

Developing alternatives to road transport also saves tonnes of CO2 produced by burning fuel. Transport is responsible for 25% of greenhouse gas emissions in France, and road transport accounts for 84% of these emissions.

Household waste, a source of energy

› In France, **energy recovery from household waste** is the **second** largest source of heat or electricity from renewable sources of energy:

• It is **the second biggest source of renewable electricity** behind hydro-electric power;
• and the **second biggest source of renewable heat** behind wood.

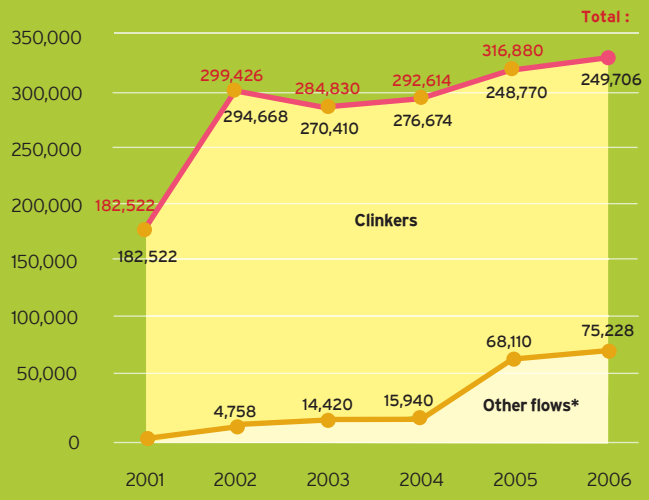
› The waste produced by ten families produces **the same amount of electricity consumed by one family.**

› The waste produced by seven families provides **heating and hot water for one family**.

Sources: The Ministry for Industry (DGEMP), Amorce/Ademe.

A significant rise in quantities thrown away since 2001

Cumulative curves



*Recyclable materials, bulky items, rubble.

Developing alternatives to road transport

17,000 lorry journeys avoided in 2006

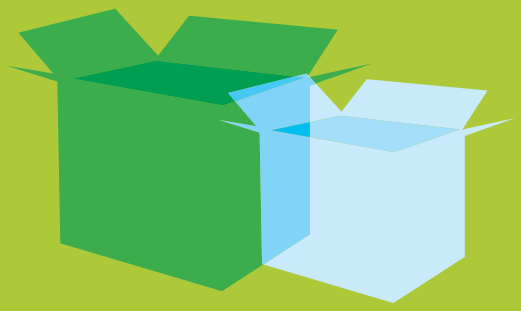
In 2006, 40% of materials leaving our various processing centres (nearly 325,000 tonnes of material, compared with 317,000 tonnes in 2005) were transported by rail and river to recovery plants. This meant that 17,000 lorries were removed from the roads in the Ile-de-France region. For 2008, the objective is to achieve a 90% transport rate by rail and river.

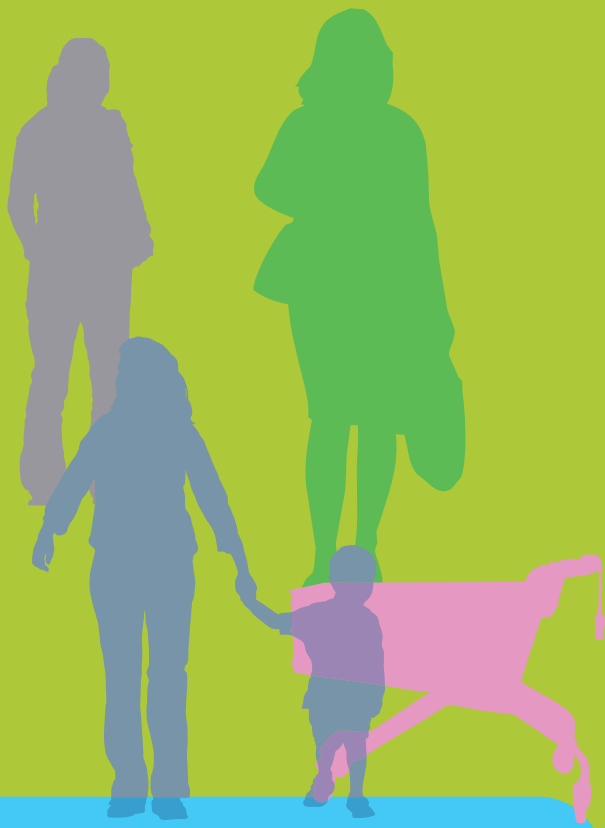
In order to reduce atmospheric pollution and the harmful effects of road traffic, SYCTOM is striving to find alternatives to road transport for waste: waterways and railways. These forms of transport allow SYCTOM to save energy, reduce carbon dioxide emissions and noise pollution, and to alleviate sources of congestion and the risk of accidents. This is why SYCTOM has been using rail and river transport for ten years and takes every opportunity to develop these forms of transport in order to manage the flows of the tonnes of materials which leave its facilities. Within the SYCTOM district, several alternative transport initiatives are currently in operation and others are planned, namely: the clinkers leaving the Ivry-Paris XIII and Saint-Ouen energy recovery centres are transported by river or rail to their processing sites; the bulky received at Saint-Denis are taken by barge to a specialist sorting centre in Bonneuil-sur-Marne; the newspapers and magazines sorted in Nanterre and Gennevilliers are transported by barge to a paper manufacturer and buyer near Rouen; and the rubble from SYCTOM waste collection centres is also taken away by river. When it becomes operational again during the second half of 2007, 104,000 tonnes of clinkers will also be transported from the Isséane plant by river. The future methanization plant at Romainville/Bobigny will be served by two alternative forms of transport: railway and the Ourcq canal. Finally, a river transfer centre for bulky items is planned for Paris XIII-Tolbiac.

The transport of materials leaving centres by rail and river

Reducing the emission of pollutants into the atmosphere

In order to provide sustainable protection for the environment and public health, SYCTOM continually strives to improve its facilities. A number of procedures are used to clean up and remove particles from waste gases: electrostatic filters, catalytic reactors, systems for processing acidic pollutants, etc. These procedures enable us to go beyond our regulatory obligations to treat fumes: the emissions of dioxins are reduced by over 90% and emissions of nitrogen oxides are below the threshold recommended in the atmospheric protection plan for the Ile-de-France region. Finally, the treatments performed in the Isséane multi-channel centre at Issy-les-Moulineaux will guarantee emissions of a quality which is well above the most recent European regulations.





Collective effort in action

Meeting the public

In the aim of both informing and creating transparency, SYCTOM is reaching out to its public – inhabitants and elected members - to engage in dialogue, debate, and explain its objectives and the way in which its facilities operate. In 2006, SYCTOM stepped up its consultation and information initiative, focussing on its processing centres, its projects and, more generally, waste management. Site visits, participation in exhibitions, environmental quality charter monitoring meetings, publications (*SYCTOM Magazine*, *SYCTOM Infos*, etc), SYCTOM websites and Isséane plant website are all tools used all year round as part of this initiative. SYCTOM involves elected members from its member local authorities, local residents and associations. In addition to annual meetings of the local information and surveillance commissions (CLIS) held at the request of the prefect, SYCTOM regularly holds a consultative commission of local public services, monitoring committees of environmental quality charters which supervise the fulfilment of agreements made by SYCTOM and the operators of its centres, and a group of "sentries" which are monitoring the construction of the Isséane plant.

The sites www.syctom-paris.fr and www.syctom-isseane.com are also important forums for exchanges with the general public. In 2006 they received more than 155,000 hits.

The SYCTOM website provides full and detailed information about the Syndicate, its waste management and pollution reduction policy, its activity, results and projects. It features dedicated spaces:
- the local authorities space provides information to member authorities and shares knowledge, tools and experience around waste prevention and recovery topics;
- the Tom site is more specifically aimed at young people and teachers. It is a tool designed to provide information and transparency, and also gives access to external sources of information, like the two studies published in November 2006 by the INVS (the French national public health supervisory institute) on the incineration of household waste.

The Isséane website is devoted to the presentation and monitoring of the future waste sorting and energy recovery centre which is due to open in the second half of 2007 in Issy-les-Moulineaux.
It gives visitors the chance to monitor the progress of construction works (webcams and slideshows), to consult indicators of environmental quality and to take part in conversations in dedicated forums.

Centres open to the general public

SYCTOM waste processing centres are regularly open to the public: **Ivry-Paris XIII, Saint-Ouen, Nanterre and Isséane**. Several open days were organised in the first three centres in 2006. Organised in a spirit of transparency and education, they allow us to meet people of all ages who want to know more about how the centres work. These meetings provide an excellent opportunity to **raise awareness of the issues linked to waste prevention at source and waste management**. Open days dedicated to younger visitors (schoolchildren or young people from municipal youth centres) were also organised. Finally, tours scheduled throughout the year provide opportunities for various groups of people to visit the centres: the general public, associations, schoolchildren, elected members and workers from our member authorities and foreign delegations. At Isséane, individual visitors can visit the

Information Space every Wednesday from 11.00 am until 6.30pm. Group visits by a diverse range of people are also organised all year round. In total, more than **2,600 people** visited SYCTOM centres in 2006.

Meetings at environmental exhibitions

SYCTOM is involved in a wide range of public events in order to **educate and raise awareness among its various audiences**: the general public, local elected members, associations, professionals. Highlights in 2006 included SYCTOM's taking part in the Waste Forum in Ivry-sur-Seine, the Salon de la Nouvelle Ville in Paris, the Environmental Biennial in Seine-Saint-Denis, the 3rd City of Paris Waste Forum, and the General Symposium on Methanization and Household Waste. These meetings with the public help to achieve the Syndicate's information objectives and contribute towards **building confidence with the population**.

Permanent observers

In Issy-les-Moulineaux, in the framework of the construction of the new Isséane multi-channel plant, volunteers, residents of Issy-les-Moulineaux and employees of companies close to the site have been asked to fulfil the role of permanent observers of the building works and to monitor any impacts on the town and its inhabitants. **This unique group of 19 "sentries"** meets every quarter to hold exchanges with SYCTOM and also helps to relay information to people living in the vicinity.

A proactive policy to diversify its processing methods

Forthcoming openings

Isséane, Issy-les-Moulineaux

This multi-channel plant will become operational in the second half of 2007. It will process the household waste from more than a million residents of 18 local authorities in the Hauts-de-Seine, 3 local authorities in Yvelines and 5 Parisian arrondissements. It will be responsible for sorting 55,000 tonnes of waste from selective collections (packaging and paper), bulky items, and for the incineration with energy recovery of 460,000 tonnes of residual household waste.

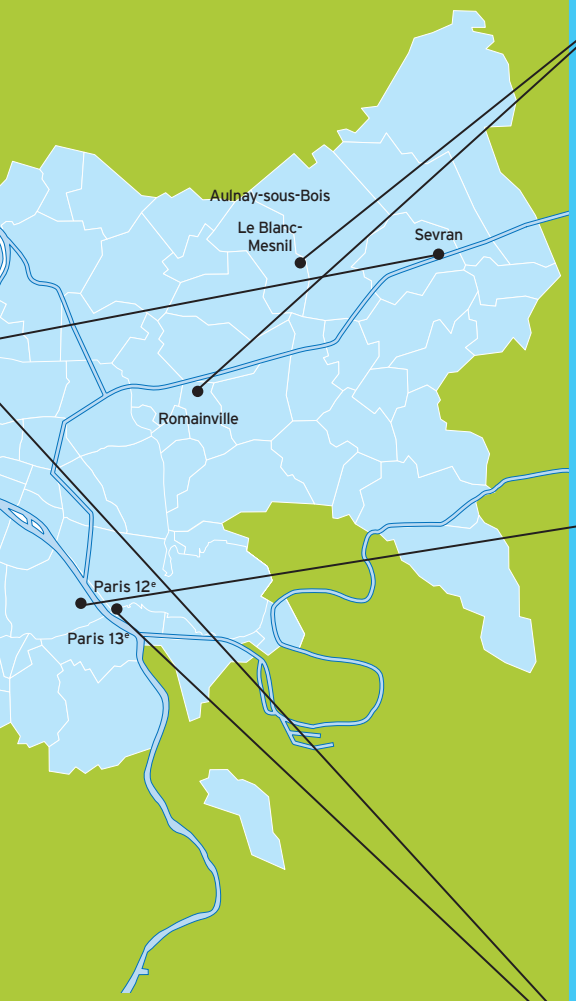
A bulky waste sorting and river transfer centre in Paris XIII-Tolbiac

With an annual capacity of 10,000 tonnes, this centre will process the selective collections from a participating area comprised of 10 Seine-Saint-Denis local authorities, with 350,000 inhabitants. Work began in September 2006 and an environmental quality charter was signed between the town of Sevran, SITOM93 and SYCTOM. It is due to become operational in the first half of 2008.

Waste sorting centre for selective collections in Paris XV

With an annual capacity of 15,000 tonnes, this unit will be reserved for the selective collections from the 14th and 15th arrondissements of Paris. Extensive archaeological digs will take place on the site in the fourth quarter of 2007: analysis from the National Institute of Archaeological Research conducted in spring 2006 revealed remains dating from 8000BC. Construction work will begin in 2008, and the centre is due to be operational in the first half of 2009.

With the construction of new sorting centres and methanization plants, SYCTOM is supporting the development of selective collections and diversifying waste treatment processes.



Projects

Two methanization plants: Romainville/Bobigny and Blanc-Mesnil/ Aulnay-sous-Bois

SYCTOM is planning to construct two biological waste treatment plants in Seine-Saint-Denis. The **Romainville/Bobigny** ecopôle project is the most advanced: a market framework was launched in 2006 for the redevelopment of the centre. It should become operational in 2012. The second project, in the **Blanc-Mesnil / Aulnay-sous-Bois** industrial estate, forms part of a partnership initiative with SIAAP (Inter-departmental syndicate for the Decontamination of the Paris Agglomeration) to process household waste and slurry from the nearby purification plant by methanization.

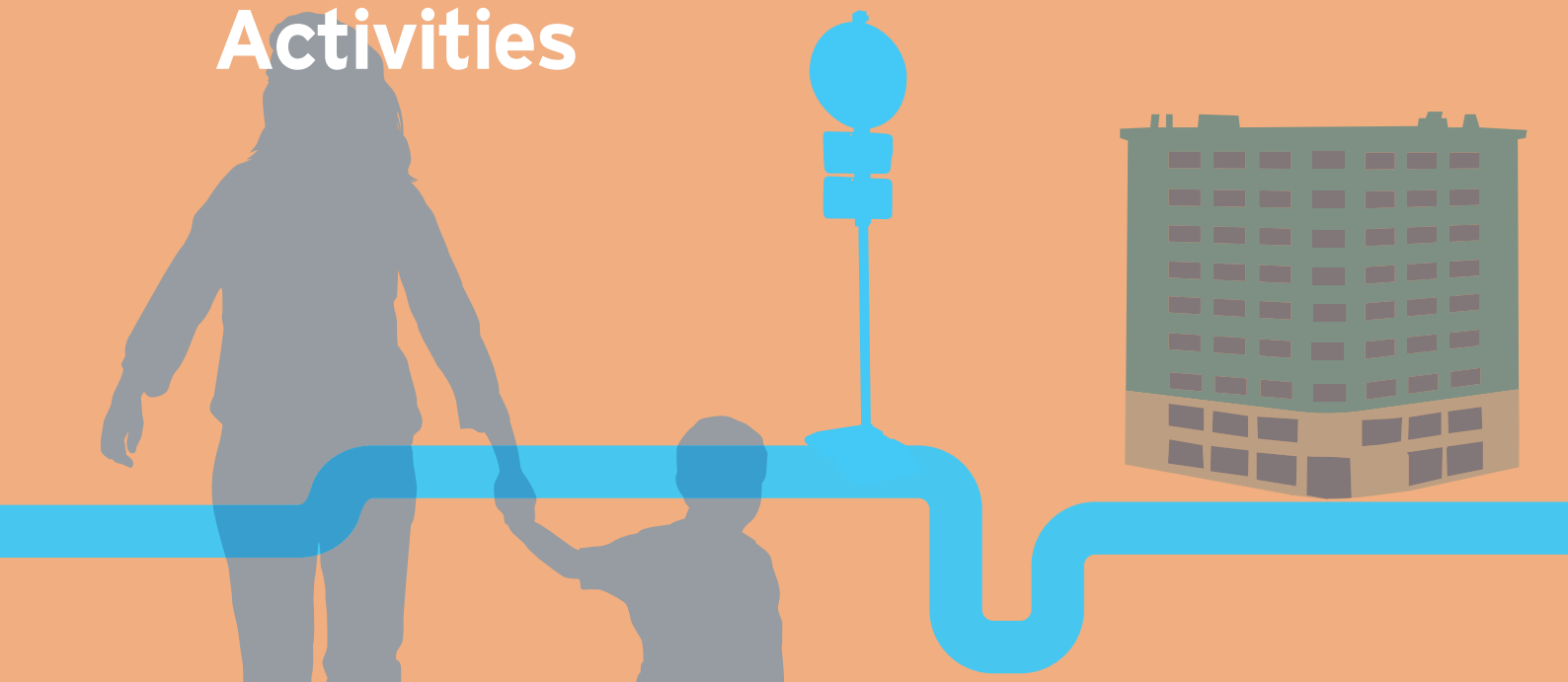
A bulky waste sorting and river transfer centre in Paris XIII-Tolbiac

In the framework of its policy to develop local facilities and use alternatives to road transport, SYCTOM has sought to purchase land at the Paris independent port authority, in order to construct a sorting centre for bulky items. Construction is due to begin in 2008: the unit will receive bulky items from neighbouring arrondissements or districts from which transfer time is limited. It will perform an on-site pre-sort to separate recoverable materials from waste materials. The latter will be taken by river to a landfill site, and the recoverable items will also be transported by river to a sorting centre.

Two selective collection sorting centres in Paris XII and Paris XVII

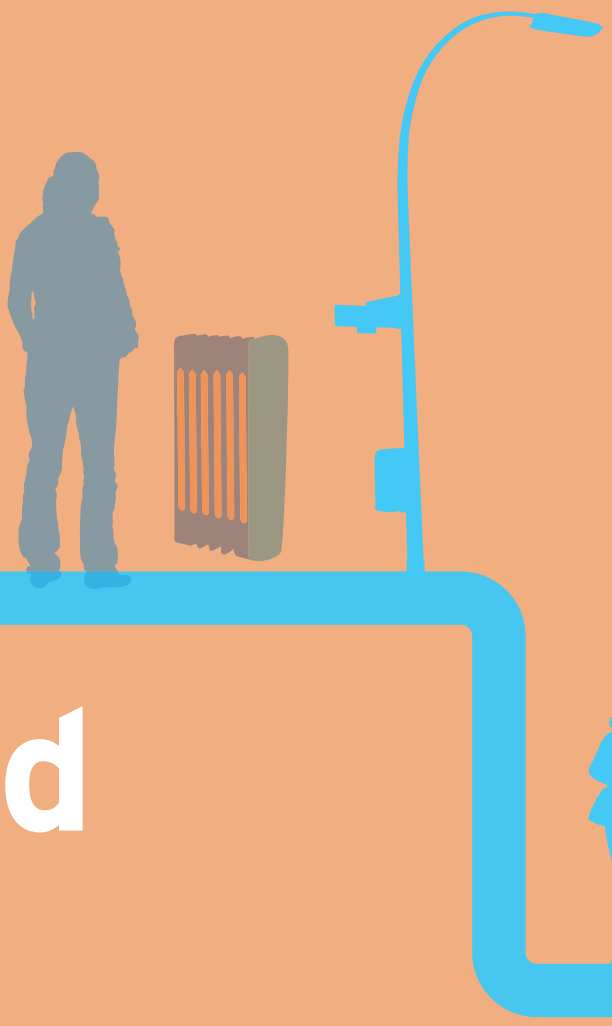
These projects are at the planning stage in Paris "intramuros" (the City without the suburbs): annual capacities of 30,000 tonnes in Batignolles and 60,000 tonnes in Bercy.

Activities



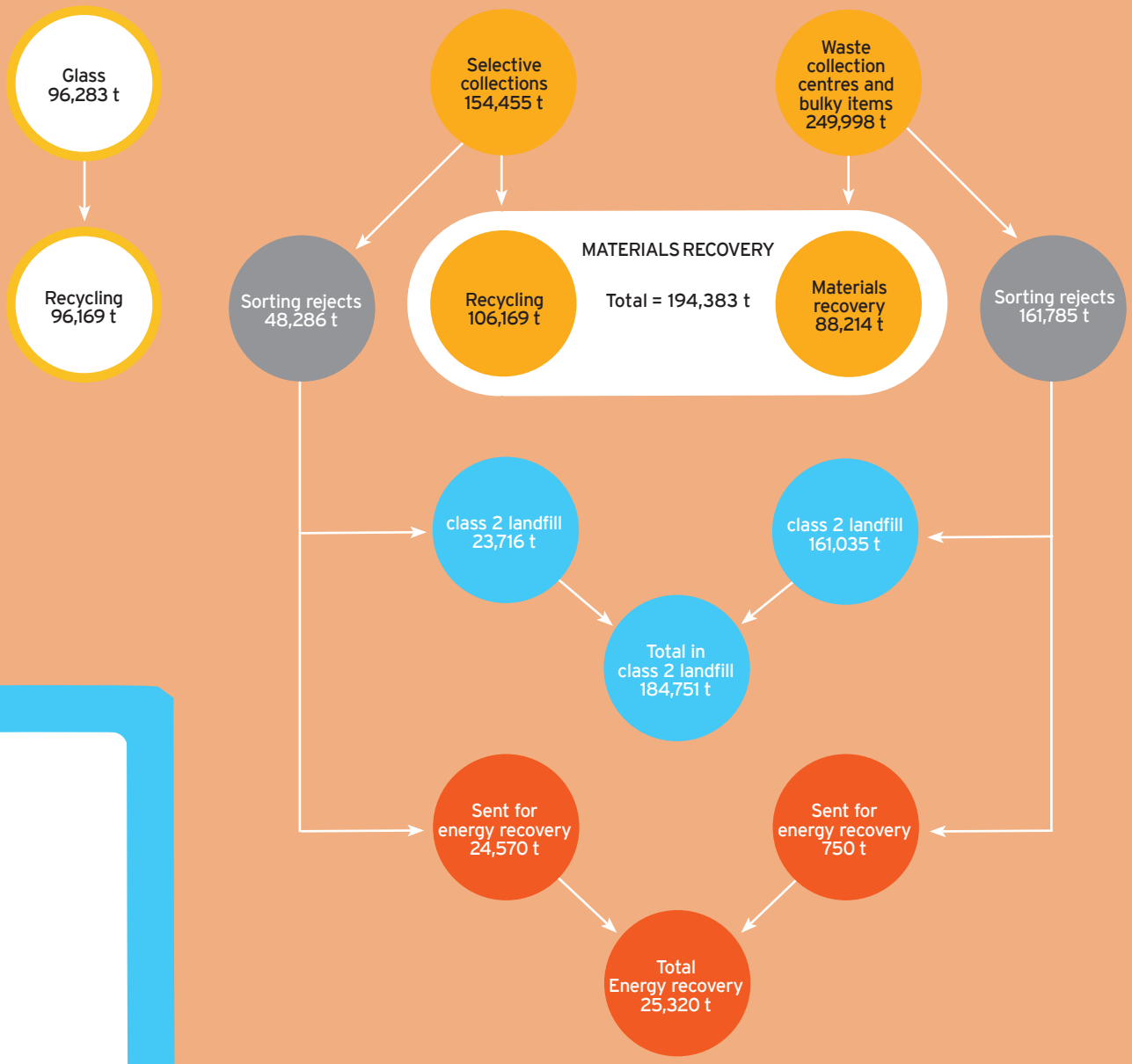
Sorting recyclable waste, incinerating the remainder: SYCTOM uses various processing methods to recover materials from the 2.5 million tonnes of household waste produced every year by the inhabitants of our member local authorities. This recovery process enables us to recycle materials and to produce energy for urban heating, with one major aim: limiting burial in landfill sites as far as possible.

03



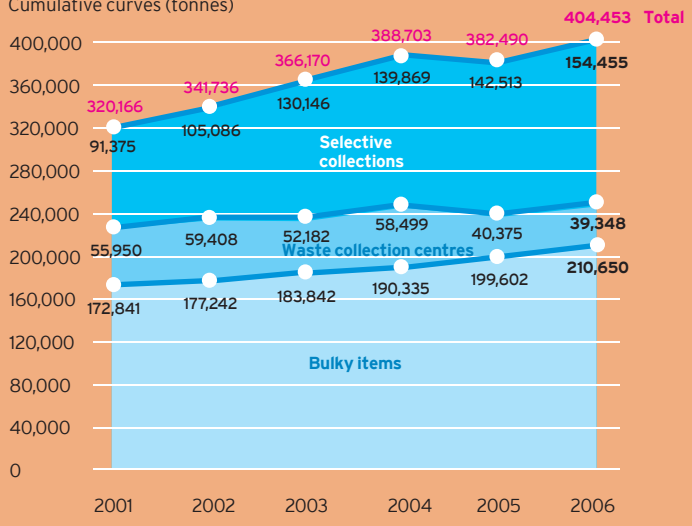
Household waste management

Materials recovery

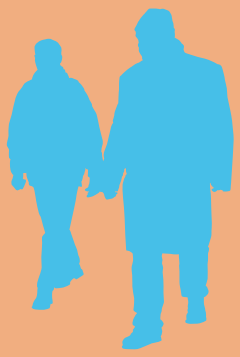


Rise in collections sent for materials recovery since 2001

Cumulative curves (tonnes)



Selective collections have increased most strongly: up 69% since 2001.



A second life for recyclable materials

Paper, cardboard, metal, glass, plastic...: waste represents a significant source of materials which can be reused to create new products. In order to develop recycling, SYCTOM is acting to encourage:

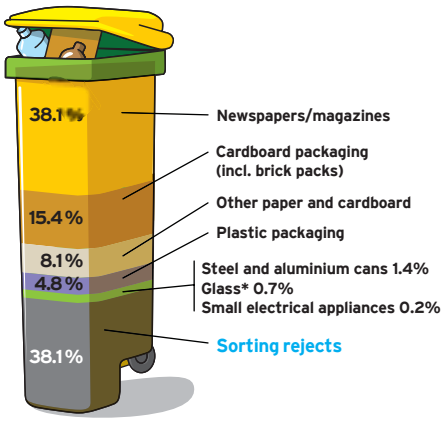
- the sorting of selective collections. To be recovered, recyclable waste must first be sorted by residents into separate containers. They are then separated by material in SYCTOM waste sorting centres before being baled and despatched along different industrial recycling channels. For example, paper makers use newspapers and magazines to make news papers, while plastic bottles can be transformed into textile fibres.
Glass packaging is collected separately in local authorities and sent directly to the buyer without passing through the SYCTOM system. Nonetheless, a small proportion of glass is received in our centres, and is sent along the Verre Avenir (Glass Future) channel to be recycled;

- the recovery of bulky items collected separately and waste taken to waste collection centres by users (mainly metal, cardboard, rubble, wood, textiles and glass). This waste is transported to specialist sorting centres to recover the recyclable materials or sent directly along reuse channels to be recycled.

- the recovery of materials following the incineration of household waste. Clinkers are used in public works, iron and aluminium are reused in the iron and steel industry.

Some waste taken to waste reception sites cannot be recovered for materials: this is sorting rejects. This dirty waste, or waste containing mixed non-recyclable materials, is incinerated in energy recovery plants or taken to landfills. In the future, some currently sorting rejects will be treated in SYCTOM methanization plants, thus allowing us to reduce the quantities of waste incinerated or taken to landfill.

What makes up a selective collection container? (recyclable waste)



** Glass has to be placed into containers or glass chutes to be recycled directly by specialist channels.*

The quality of waste sorted by residents could be improved

More than 30% of materials thrown into recycling containers (often the yellow containers) cannot be recycled. Half of these sorting rejects are non-recyclable and are the result of sorting errors. The other half, meanwhile, is recyclable waste, but cannot be processed, because it is dirty, meshed together, too small or has been placed in plastic bags. In 2006, these sorting rejects accounted for 50,000 tonnes of waste which had to be taken to incinerators or landfill sites.

Sorting
at a SYCTOM centre.

A constant increase in tonnages of waste sorted

Selective collection

Between 2001 and 2006, the selective collections processed by SYCTOM increased by 69%, from 91,375 tonnes to 154,455 tonnes. This significant rise is the result of three main factors: the implementation of multi-material selective collection in all SYCTOM member local authorities; the increasing participation of residents in recycling activities; and the awareness-raising campaigns undertaken by SYCTOM and local authorities designed to raise the profile of waste prevention and recovery.

However, the success of selective collection varies considerably from authority to authority: in 2006, some achieved average returns of less than 19kg/person while others exceeded 40kg/person. The quantity of waste recycled depends directly on the quality of collections. This is why SYCTOM is working in close collaboration with local authorities to continue to develop selective collections. As an incentive, it is offering them assistance amounting to €45.73 per tonne collected selectively and is exempting them from the payment of the charge of €80.16/tonne due on all waste. This amounts to a total saving of €125.89 per tonne of selective collections for local authorities in 2006. Local authorities also enjoy assistance provided by Eco-Emballages (Eco-Packaging) for carrying out cost and diagnostic studies in order to optimise selective collections, in addition to financial aid for their information campaigns on this subject.

Bulky items

The quantities of bulky items being taken to centres continue to increase, rising by 6% between 2005 and 2006, from 199,602 tonnes to 210,650 tonnes. In order to better recover materials from these rising volumes, SYCTOM has, in its new sorting contracts, set the objective of recycling at least 45% of waste. Achieving this objective depends on the nature of the supply: member local authorities must therefore be encouraged to better organise their collections and to send for incineration waste which is intended for energy recovery (bags of household waste, waste from street bins, etc.). A quality control procedure on the nature of bulky items collected is now in force. It allows us to reduce the proportion of undesirable elements such as domestic waste, green waste and special domestic waste (acids, solvents, paint, fuels, etc.)

Waste collection centres

In order to ensure that residents have a local service available, new waste collection centres have been built in the SYCTOM district, increasing the handling and materials recovery capacity for waste which, because of its size or toxicity, cannot be thrown in the bin. In 2006, 39,348 tonnes of waste was taken to SYCTOM's three waste collection centres, compared with 40,375 tonnes in 2005. This slight fall is linked to new rules governing access to these centres which apply to single, private individuals.

Improving materials recovery

In order to improve the quantity and quality of selective collections and bulky items provided by local authorities to its centres, SYCTOM is suggesting areas for improvement. Indeed, the quality of the initial supply is determinant in increasing recycling levels and reducing the proportion of sorting rejects. In 2007 work is being undertaken in collaboration with technical personnel in the local authorities in order to increase involvement in this initiative.

The buy-back channels for recyclable materials

Material	Channel	Type of purchase	Tonnage recycled	Tonnage Equivalence in terms of products recycled
Newspapers/magazines	UPM-Chapelle Darblay	Direct contract	58,789	293 million newspapers (150g per unit)
Recyclable domestic packaging (cardboard)	Papeterie de la Seine	Guaranteed purchase	23,097	320 million cardboard cereal boxes (cont. 4.3 l 72g)
Liquid food packaging (brick packs)	Dalle Hygiène Production	Guaranteed purchase	736	28 million brick packs (1 litre)
Steel from selective collections and from clinkers	TIRFER	Guaranteed purchase	39,439	433 million food tins (0.94 cl - 12 cm)
Aluminium from selective collections and from clinkers	ALCAN	Guaranteed purchase	3,237	215 million cans (33cl)
Plastic (bottles)	SITA	Guaranteed purchase	7,398	255 million plastic bottles (opaque and rigid) or 14 million polar fleece jumpers (400g per unit)

SYCTOM's sorting and waste collection centres

Sorting centres are vital links in the recycling chain: they receive the recyclable materials from selective collections and bulky items. SYCTOM currently has three sorting centres for selective collections, two sorting centres for bulky items, and three waste collection centres. In order to continue to support the growth of selective collections, three new sorting centres will be open by 2009 in Issy-les-Moulineaux, Sevran and Paris XV. Others will follow in Paris.

Romainville is the leading high-capacity sorting centre in France, and opened in 1993. The site features a transfer centre (capacity of 350,000 tonnes/year), a sorting centre for selective collections and bulky items (capacity 130,000 tonnes/year) and a waste collection centre. It is soon to be redeveloped to include a methanization plant and a sorting centre for selective collections.

Ivry-Paris XIII has since 1997 boasted an energy recovery plant, a waste collection centre and a sorting centre for selective collections. With an annual capacity of 30,000 tonnes, it processes selective collections from 19 local authorities (900,000 inhabitants).

The **Nanterre** sorting centre for selective collections has been open since 2004 and has an annual capacity of 30,000 tonnes. It is a manifest example of the Syndicate's wish to create constructions of a high environmental quality. It processes selective collections of household packaging (cardboard, plastic, steel, aluminium, newspapers/magazines and office paper) from one million inhabitants of the Hauts-de-Seine and west Paris.

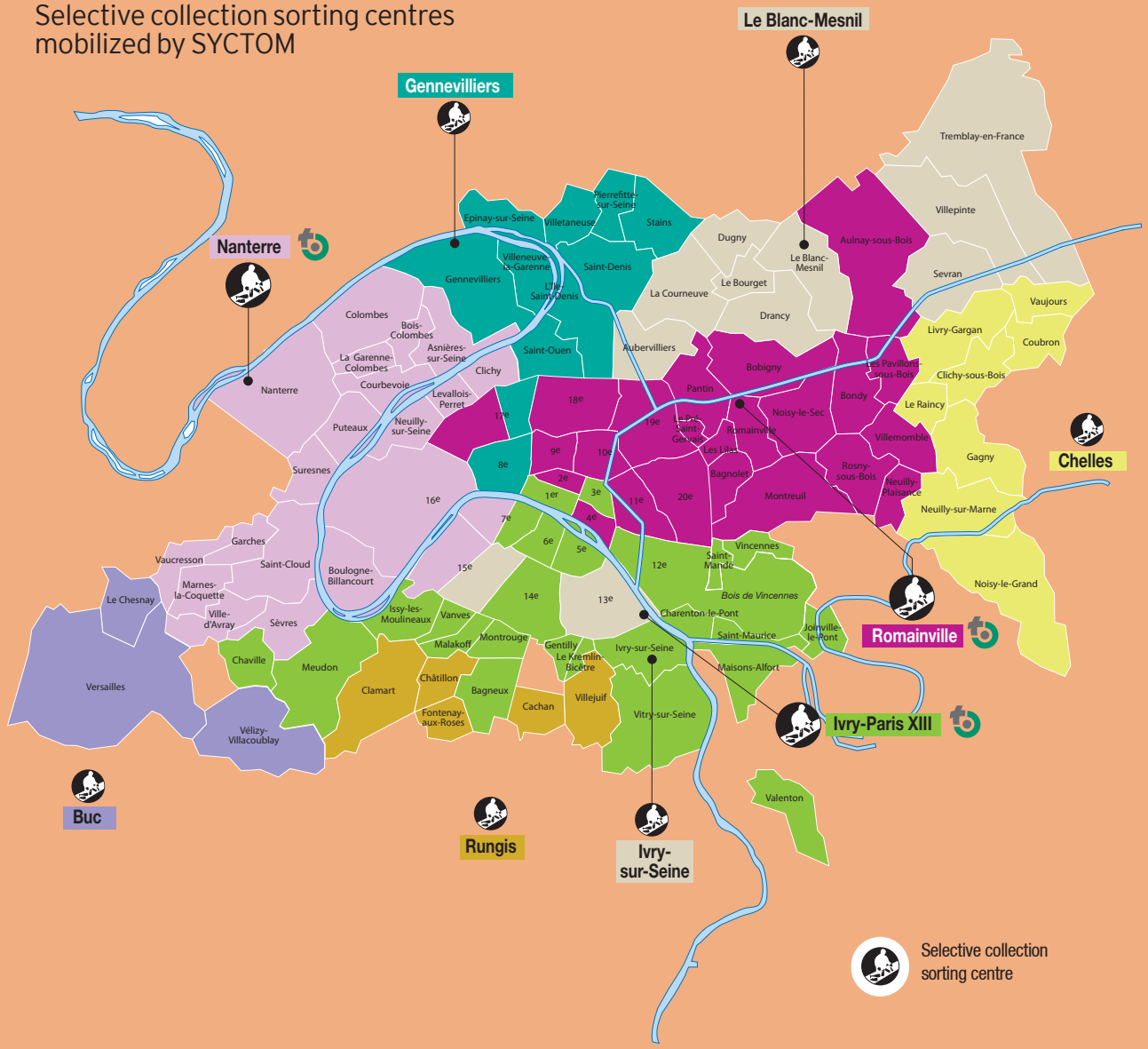
Finally, **Saint-Denis** is a centre specialising in bulky items. It brings together on one site a sorting centre and a collection centre. It has an operating capacity of 60,000 tonnes/year. A grapple is used to carry out a pre-sort of collected bulky items. The recoverable items are then taken by river to a specialist sorting centre in Bonneuil-sur-Marne.

In order to support the development of selective collections in its area, SYCTOM also works with six private centres, tendered according to a public market procedure, in **Buc, Chelles, Gennevilliers, Ivry-sur-Seine, Rungis and Blanc-Mesnil**.

Fostering the creation of waste reception units

SYCTOM is encouraging the development of waste collection centres within its area. Up to the end of 2006, it arbitrated requests for subsidies from local authorities in the framework of the Terres Vives contract signed with the Ile-de-France regional authority. In addition to the 15% subsidy allocated by the latter, the Syndicate contributed an additional sum of 15%, taking the overall support given to local authorities to 30% of civil engineering and equipment expenditure.

Selective collection sorting centres mobilized by SYCTOM



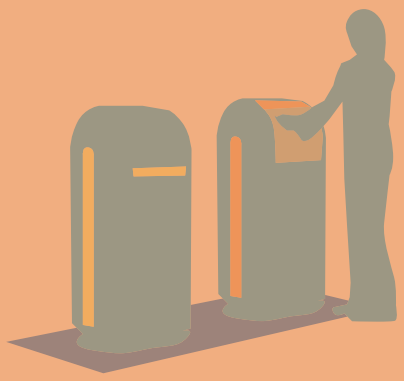
Selective collections

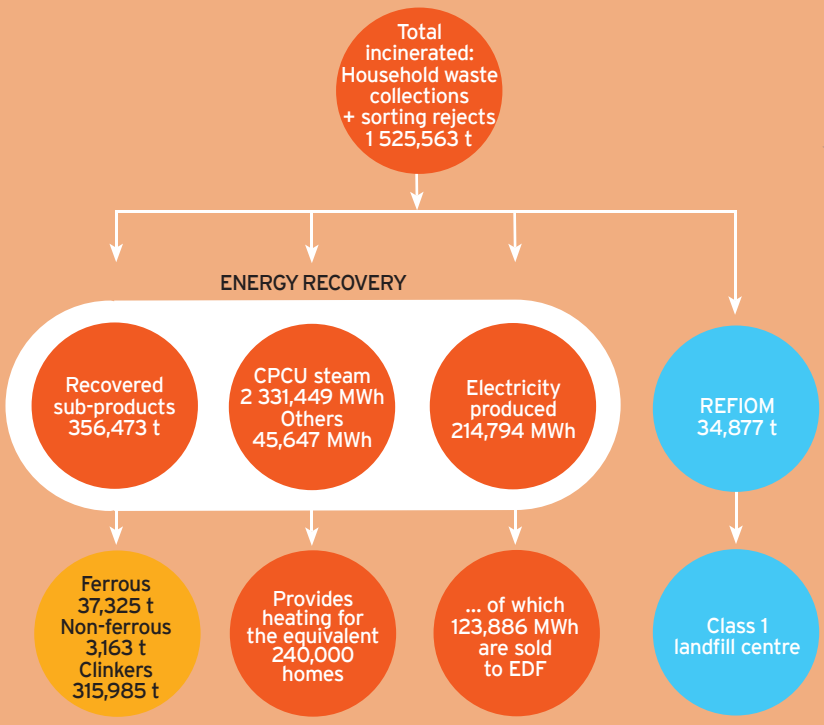
Centre	Tonnage received	Tonnage recovered	Operator
Ivry-Paris XIII	36,076	25,401	SITA
Nanterre	32,452	23,483	Généris
Romainville	38,698	21,352	Généris
Buc	6,999	5,515	Nicollin
Chelles	7,776	6,463	Généris
Gennevilliers	11,912	8,959	SITA
Ivry/Blanc-Mesnil	15,153	10,463	Paprec
Rungis	5,388	4,532	SIEVD
TOTAL	**154,455**	**106,169**	

Bulky items and waste collection centres

Centre	Bulky items		Déchetteries		Operator
	Tonnage received	Tonnage recovered	Tonnage received	Tonnage recovered	
Ivry-Paris XIII			4,770	4,020	SITA
Romainville	79,292	30,772	25,929	13,500	Généris
Saint-Denis	66,774	24,228	8,650	6,162	Généris
Arcueil	34,749	3,825			SITA
Buc	14,321	1,385			Nicollin
Ivry	15,513	4,321			Revival
TOTAL	**210,650**	**64,532**	**39,348**	**23,682**	

Energy recovery





When waste becomes a source of energy

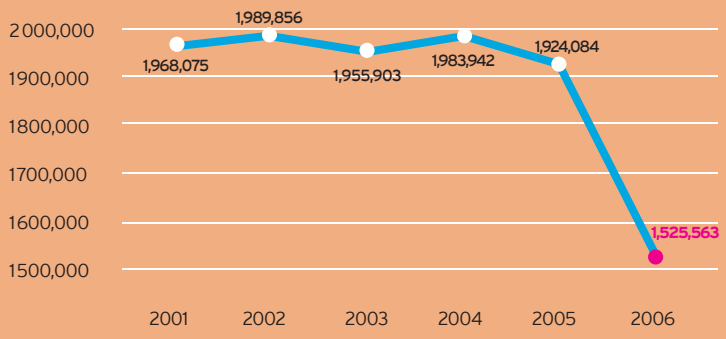
In a densely populated urban area, one of the most satisfactory solutions to the problem of non-recyclable waste, in environmental terms, is energy recovery through combustion: it produces energy and reusable materials, while also avoiding landfill.

The heat produced by incinerating waste is recovered and transformed into energy, in the form of electricity and steam. A proportion of this electricity is used to operate the centre, and the surplus is sold back to EDF. The steam, meanwhile, is sold to CPCU (Paris Urban Heating Company), thus heating homes.

The materials produced by combustion are also recovered. The scrap metal is sold to metalworking companies to produce new alloys. The clinkers are treated and are then used in public construction works, thus avoiding mining the raw materials in the natural environment.

The residues from smoke scrubbing after household waste incineration (REFIOM) concentrate the pollutants found initially in the waste or generated by the incineration process. They are treated to make them inert, and are then buried in specialist sites.

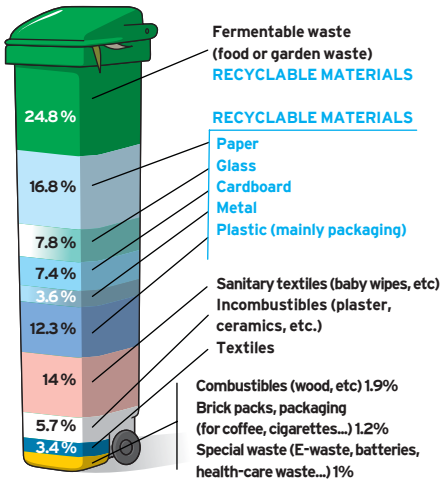
A transitory fall in tonnages of waste incinerated by SYCTOM
(all centres included)



This exceptional situation is linked to the stoppage of incineration activity at IssylesMoulineaux on 23 February 2006, which led to reduced energy recovery capacity within the Syndicate until the Isséane plant opens.

Energy recovery and materials recovery

Composition of a traditional domestic waste container



Too much recyclable material is thrown away with conventional waste.
More than 40% of waste thrown away into traditional domestic waste containers is made up of recyclable elements : paper, cardboard, metal, plastic and glass bottles. Most of these objects should be placed in the recycling container and recycled. Special waste, which contains harmful substances should not be thrown away with traditional waste. It is sorted by specialist companies.

Source: Modecom 2006, method for characterising domestic waste developed by Ademe.

In 2006, SYCTOM's three incineration and energy recovery plants and the four private units which it uses processed a total of 1 525,563 tonnes of waste. They generated a number of sub-products:

- 2,331,449 MWh of steam, sold by SYCTOM centres to the CPCU for the heating of the equivalent of 240,000 homes, amounting to a saving of 240,000 TOE (tonnes of oil equivalent);
- 45,647 MWh of steam sold by the private incinerators;
- 123,886 MWh of electricity sold to EDF;
- 37,235 tonnes of ferrous metal;
- 3,163 tonnes of aluminium;
- 315,985 tonnes of clinkers.

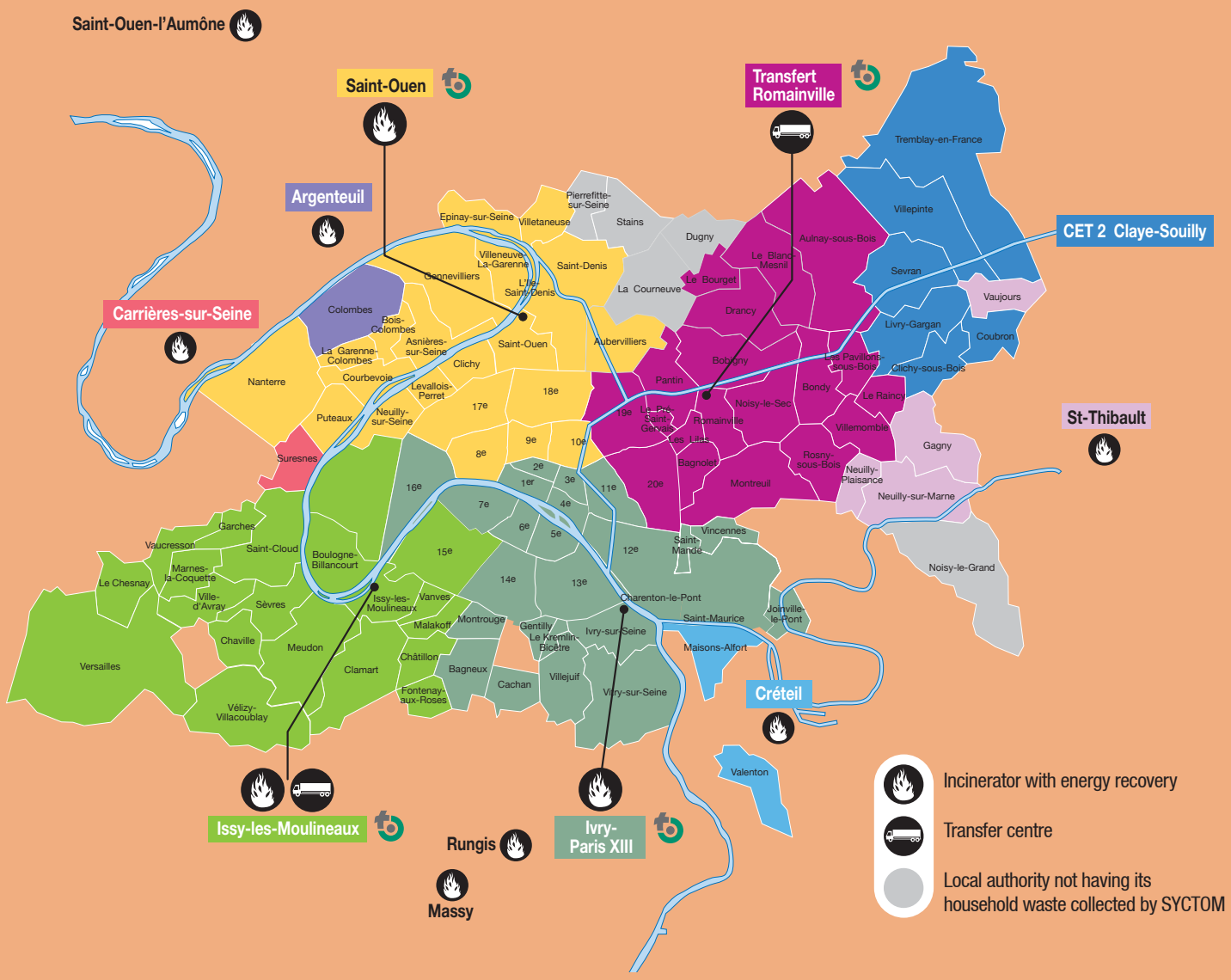
The energy recovery plant in **Issy-les-Moulineaux** had to halt incineration activity on 28 December 2005 in order to be converted into a temporary waste sorting centre until the Isséane plant comes into service. By order of the State, the incinerator nevertheless continued to operate until 22 February 2006 in order to provide heating for around 5,000 homes and several public buildings, including hospitals, and companies.
The transfer centre has been in operation 23 February 2006. It has processed 265,050 tonnes of waste transported from processing plants in Ile-de-France: 113,031 tonnes were used for energy recovery, 6,448 tonnes were composted, and 149,542 tonnes went to landfill.

The **Ivry-Paris XIII** centre has a processing capacity of 730,000 tonnes/year and processes the traditional waste from 1.2 million inhabitants. SYCTOM is planning a major redevelopment of this centre, which will be 40 years old in 2009, with the adoption of new recovery techniques (methanization) allowing us to limit incineration. The project aims to integrate demanding environmental criteria into the design of the facilities and to ensure that it is perfectly integrated into its urban environment.

The **Saint-Ouen** energy recovery plant, built in 1990, is SYCTOM's newest such plant. Since it was built it has employed the most advanced smoke processing techniques and environmental integration techniques It currently processes the collections from more than 1.3 million inhabitants.

In order to reduce reliance on landfill, in 2006 SYCTOM used, in addition to its own capacity, a greater number of external energy recovery plants, in the framework of public contracts. Eight centres, in **Argenteuil, Carrières-sur-Seine, Créteil, Massy, Monthyon, Rungis, Saint-Ouen-l'Aumône** and **Saint-Thibault-des-Vignes** processed 156,109 tonnes of domestic waste from local authorities which are members of SYCTOM.

The energy recovery plants mobilized by SYCTOM



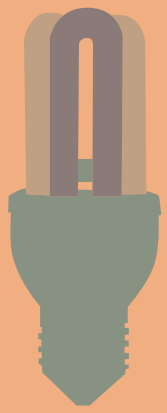
Centre	Tonnage processed	Recovery					Operator
		Steam sold (MWh)	Electricity sold (MWh)	Clinkers (t)	Ferrous (t)	Non ferrous (t)	
Ivry-Paris XIII	663,429	966,942	81,138	134,657	16,321	644	TIRU
Issy-les-Moulineaux	70,041	129,063	1,601	16,579	2,303	519	TIRU
Saint-Ouen	629,928	1,235,444	10,113	132,045	15,826	1,834	TIRU
Argenteuil	61,377	17,383	12,305	12,534	911	71	Novergie
Carrières-sur-Seine	20,752	6,070	964	5,467	306	28	Novergie
Créteil	16,821	0	8,144	3,202	237	36	Novergie
Massy	5,041	6,768	0	1,219	0	0	Curma
Monthyon	5,535	0	2,083	1,270	74	0	Généris
Rungis	3,111	4,210	0	585	73	2	Généris
St-Ouen-l'Aumône	9,039	11,217	1,364	1,849	125	20	Généris
St-Thibault-des-Vignes	30,052	0	6,174	6,578	1,150	10	Novergie
Autre	3,849						
TOTAL	**1,518,975**	**2,377,097**	**123,886**	**315,985**	**37,325**	**3,163**	

A form of incineration which respects the environment

In a densely populated urban area, incineration with energy recovery is today, in environmental terms, the most satisfactory solution for dealing with the majority of normal household waste collections. The maximum levels of pollutant emissions set in the regulations governing incineration facilities have been falling for several years. SYCTOM had anticipated the new standards, in force since 28 December 2005, by launching in 2000 a major improvement programme for its smoke processing systems in its Saint-Ouen and Ivry-Paris XIII plants. Since the closure of the incineration plant was scheduled for December 2005, however, this plant was not covered by the improvement works. The need to extend energy recovery activity until February 2006, at the request of the Prefect, in order to ensure the continuity of urban heating provision, therefore caused lower quality atmospheric emissions than those produced by the two other SYCTOM centres at the beginning of 2006.

Condensed water vapour makes the plume of smoke leaving the chimney visible.

Control and command room.



Waste combustion: a resource for urban heating

In Ile-de-France, the high concentration of housing, offices and public buildings makes very high demands on the supply of heating and clean, hot water.
600,000 home-equivalent units of heating are connected to the Paris Urban Heating Company (CPCU) network, accounting for a quarter of the requirements for heat for the capital and the towns of Vitry, Choisy, Boulogne-Billancourt, Issy-les-Moulineaux and Saint-Ouen.
In order to satisfy these needs, the CPCU uses **all the steam produced** in the SYCTOM incineration plants. This steam provides nearly half of its network's energy needs and thus supplies 300,000 home-equivalent units.
The steam is directed into underground CPCU channels, then into the buildings on the network, where it is converted into hot water for radiators and the clean, hot water system. This contributes to the **fight against global warming**, since urban heating takes the place of the equivalent of 6,000 collective boilers for buildings.

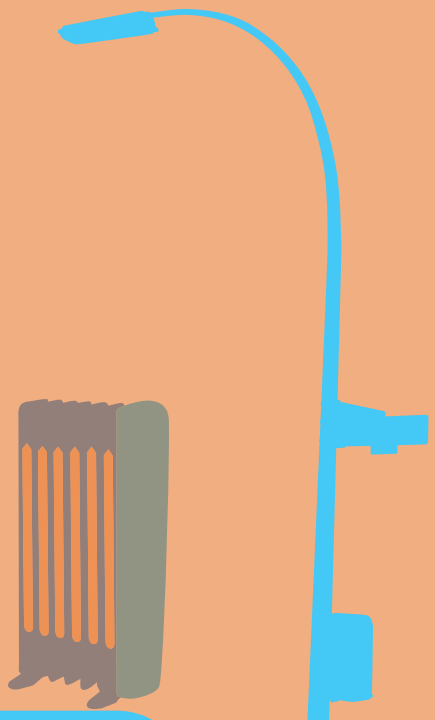
The management of atmospheric emissions from incinerators with energy recovery belonging to SYCTOM in the Paris agglomeration

Values from combustion in 2006 (IRH Laboratory)

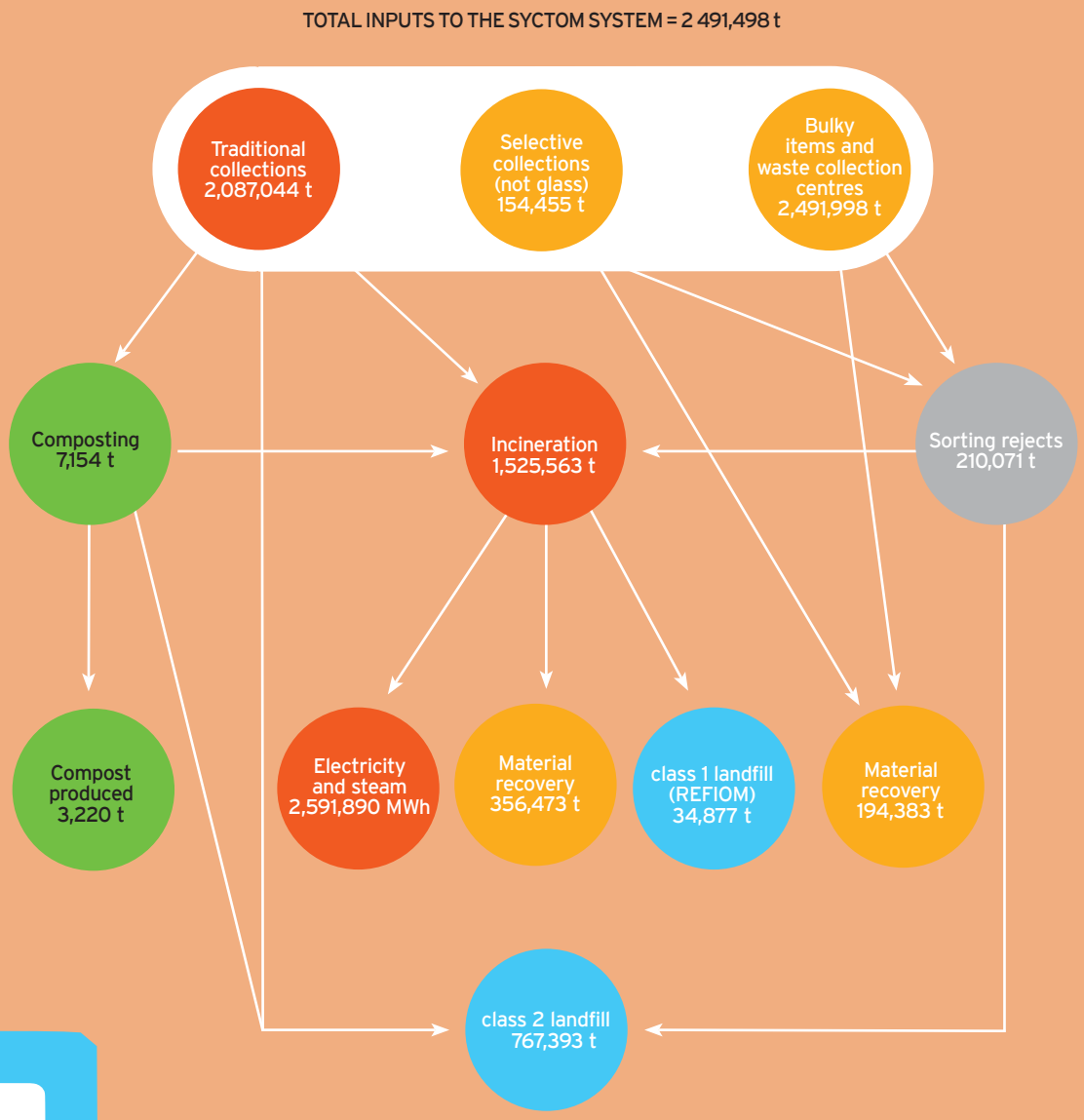
Nature of emissions	Daily emission limit before le 28/12/2005	Issy-les-Moulineaux	Daily emission limit applicable since 12/28/2005	Ivry-Paris XIII				Saint-Ouen			
	Ministerial decree of 01/25/1991	Feb 2006	Ministerial decree of 12/28/2002	March 06	May 06	Aug 06	Oct 06	March 06	June 06	Aug 06	Oct 06
Concentrations in mg/Nm³ at 11% d'O											
Particles	30	34	**10**	5.5	4.0	2.7	4.4	4.7	1.9	7.1	6.1
Hydrochloric acid	50	1.5	**10**	0.8	1.5	0.5	0.5	0.1	0.7	3.5	0.4
Hydrofluoric acid	2	0.1	**1**	0.1	< 0.2	0.2	< 0.2	< 0.1	< 0.2	< 0.3	< 0.3
Sulphur dioxide	300	11	**50**	27	29	17	14	13	13	10	12
Nitrogen oxides	_		**200 (80[2])**	52	66	51	47	39	73	35	43
Lead + chrome + copper + manganese	5	0.2	_	_	_	_	_	_	_	_	_
Nickel + arsenic	1	0.01	_	_	_	_	_	_	_	_	_
Cadmium + mercury	0.20	0.02	_	_	_	_	_	_	_	_	_
Cadmium + thallium	_	_	**0.05**	< 0.02	< 0.02	< 0.006	< 0.004	< 0.03	< 0.006	< 0.006	< 0.008
Mercury	_	_	**0.05**	0.002	0.008	0.006	0.004	0.007	0.004	0.008	0.006
Antimony + arsenic + lead + chrome + cobalt + copper + manganese + nickel + vanadium	_	_	**0.50**	0.13	0.09	0.11	0.13	0.10	0.10	0.19	0.13
Dioxins et furans (in ng/Nm³)	10[1]	1.7	**0.10**	0.04	0.15[3]	0.05	0.02	0.03	0.004	0.003	0.03

(1) Value set by the Minister, in nanograms per cubic metre (ng/Nm3).
(2) Value set by the Ile-de-France atmospheric protection plan.
(3) Average of the 2 furnaces, which includes a measurement of 0.01 ng/Nm3 from furnace 1 and 0.2 ng/Nm3 from furnace 2, an isolated value which was neither observed nor corroborated by other regulatory or sporadic measurements made in 2006.

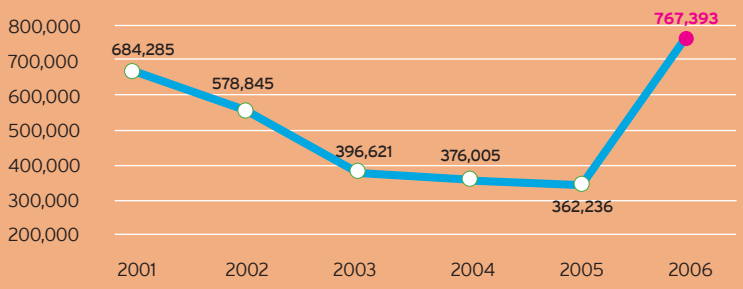
Waste incineration
in the boiler/furnace



Landfill
a transition period with the closure of Issy 1



An exceptional and temporary rise in tonnages of waste landfilled in class 2 by SYCTOM



This temporary situation is linked to the stoppage of incineration activity at Issy-les-Moulineaux since February 2006 the 23rd, which has led to a reduced capacity for energy recovery in the Syndicate. Pending the opening of Isséane, waste has been incinerated or landfilled in centres in the Ile-de-France and the Oise.

Landfill, the last resort solution

Since July 1st 2002, landfill (burial) has been reserved for "residual" waste, in other words waste from which the recyclable elements have been extracted, or which cannot be recycled in acceptable technical or economic conditions. This definition applies to different realities in different areas. In an area which does not have an energy recovery plant, any waste from which the material or organic elements cannot be recovered is residual waste. On the other hand, if the same waste is produced in an area which is equipped with such a plant, these elements can be used to provide energy.

Actions undertaken by SYCTOM

In the SYCTOM district, landfill is reserved for unrecovered bulky items, scrap from waste collection centres, sorting rejects, and waste from traditional collections which the Syndicate cannot process in energy recovery plants, because of a lack of available capacity.
In order to respect its regulatory commitments, and to sustainably protect the environment, SYCTOM has implemented short and long-term solutions aiming to drastically reduce the proportion of waste going to landfill. To this end, it uses external incinerators in order to increase its energy recovery capacity. It is also increasing and diversifying its own treatment capacities, improving material recovery and helping to reduce the quantities of waste produced at source.
This initiative is bearing fruit. The tonnages of household waste landfilled were reduced by half between 2001 and 2005. In 2006, however SYCTOM had to deal with an exceptional and temporary situation: the halt in incineration activity at Issy-les-Moulineaux on February 23rd cut the Syndicate's incineration capacities. Pending the opening of the Isséane centre, several incinerators in the Ile-de-France area have been used to process 113,031 tonnes of waste, with the remainder having to be sent to a number of CET (landfill centres) in Seine-et-Marne, Val-d'Oise and Oise. Against this background, the total landfill requirement reached 767,000 tonnes in 2006.

Technical landfill centres (CET)

CET are classified facilities for the protection of the environment and are subject to the prefect's authorisation:

- Class 1 landfill sites: reserved for dangerous waste; they process industrial waste or, in the case of SYCTOM, REFIOM (Residues from smoke scrubbing after household waste incineration) and slurry from the cleaning up of fume wash-water. This toxic waste is stabilised before storage in order to prevent any changes to the residues over the long term. Once they are inert and solidified, they are stored in indexed waterproof compartments to ensure their traceability.

- Class 2 landfill sites: these process non-dangerous waste: residual household waste, unrecovered bulky items, sorting rejects from selective collections or composting. Nevertheless, their operation is subject to very strict regulations on the recovery of biogas, rainwater drainage, the recovery and treatment of leachates, the waterproofing of the sub-surface and the quality of the water table.

- Class 3 landfill sites: reserved for inert waste such as rubble.

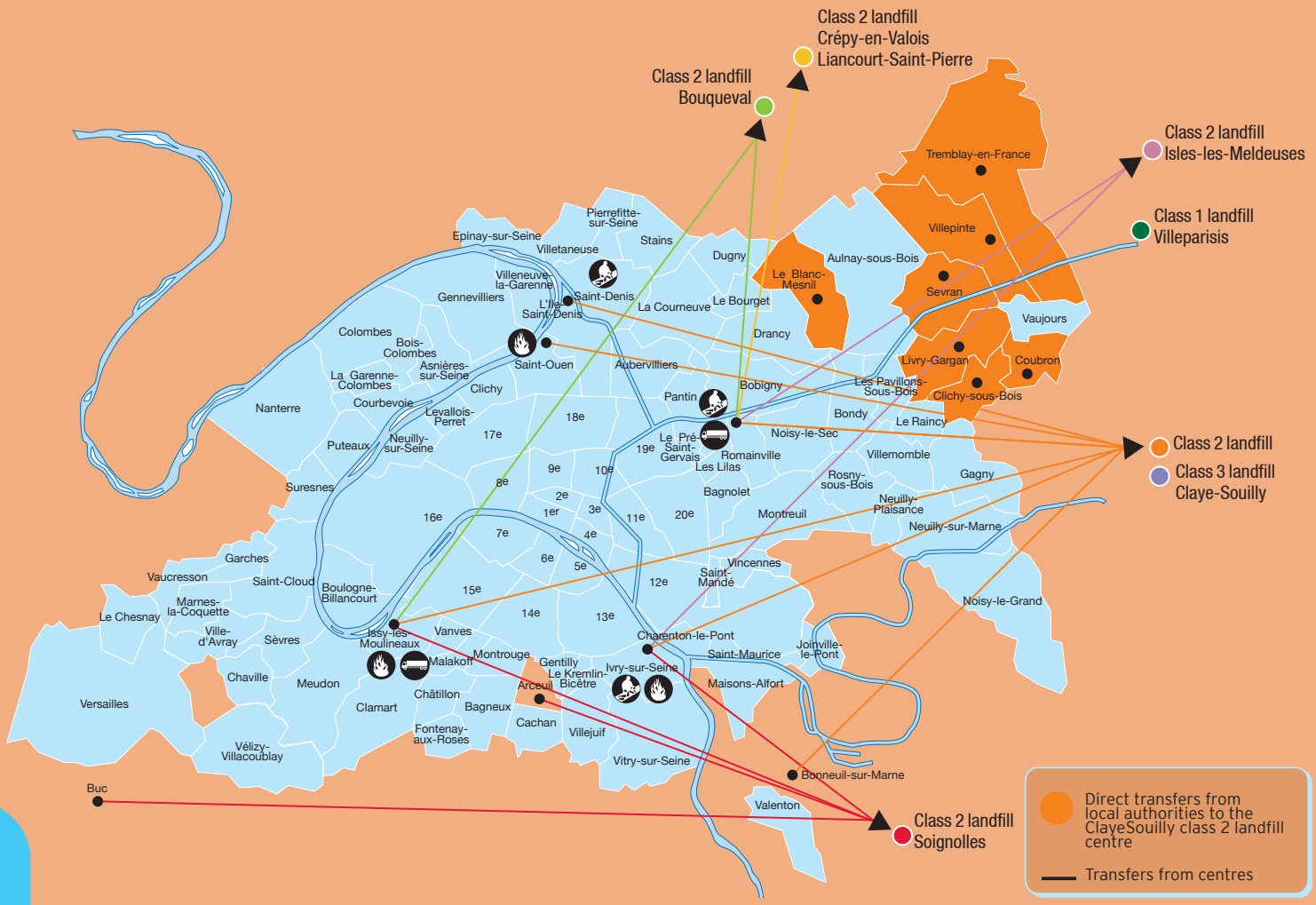
The Claye-Souilly landfill centre

Sites outside the SYCTOM area

As a result of the high density of its land area, SYCTOM cannot operate landfill sites within its own operating boundaries. It therefore relies on sites located outside its boundaries. These sites are chosen according to public contract procedures, and according to the quality of the services offered, the prices proposed and the compliance of the facilities with environmental standards. The sites operated by SYCTOM contractors are ISO 14001 certified. This standard guarantees the implementation of a series of measures relating to environmental quality:
- compliance with regulatory obligations;
- ongoing control of the implementation of regulations relating to the environment;
- the identification and control of technological risks and accidental pollution which could be caused by these activities, in order to reduce environmental impact;
- the definition of objectives for the continual improvement of consumption and discharge management, and compliance with these objectives using indicators;
- the education and training of all staff in the environmental impacts of the site's activities.

In 2006, SYCTOM used several landfill sites:
-a class 1 landfill site in **Villeparisis** (Seine-et-Marne), which processed 29,666 tonnes of residual waste from SYCTOM in the form of ash and slurry;
-class 2 landfill sites in Seine-et-Marne (**Claye-Souilly, Isles-les-Meldeuses, Soignolles**), in the Val-d'Oise (Bouqueval) and in the Oise (Crépy-en-Valois, Liancourt-Saint-Pierre). These centres processed 693,124 tonnes of waste;
-a class 3 landfill site in **Claye-Souilly**, which in 2006 processed a total of 35,816 tonnes of inert waste, mainly from SYCTOM centres.

Landfill centres mobilized by SYCTOM



Tonnages sent to landfill centres under SYCTOM contracts

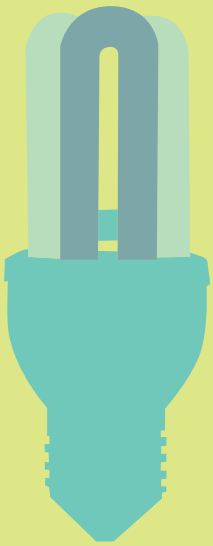
CET	Classe	Waste from	Tonnage	Operator
Villeparisis	1	Ivry-Paris XIII Incinerator Issy-les-Moulineaux Incinerator Saint-Ouen Incinerator	14,319 1,625 14,022	SITA
Claye-Souilly	2	Romainville Centre Issy Transfer Centre Direct transfer Centre Ivry-Paris XIII Incinerator Saint-Ouen Incinerator Issy-les-Moulineaux Incinerator Saint-Denis Centre Claye Centre Bonneuil Centre	210,273 118,188 72,009 28,619 10,025 876 25,620 21,482 19,415	REP
Isles-les-Meldeuses	2	Romainville Centre Ivry-Paris XIII Centre	63,033 1,099	Sablières Capoulade
Bouqueval	2	Romainville Centre Issy Centre	41,044 7,750	REP
Soignolles	2	Issy Centre Ivry-Paris XIII Centre Arcueil Centre Buc Centre	23,604 73 974 627	SITA
Crépy-en-Valois/Liancourt-Saint-Pierre	2	Romainville Centre	48,414	SITA
Claye-Souilly	3	Romainville Centre Saint-Denis Centre Ivry Waste collection centre Claye Centre	19,738 5,967 3,098 7,013	REP

Budget and organization

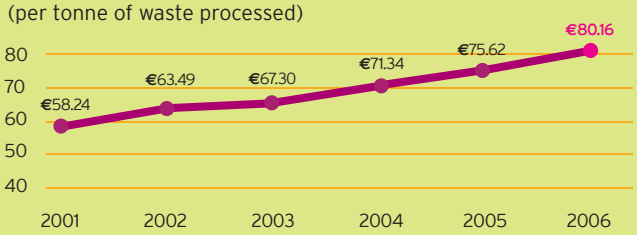
In 2006, SYCTOM in the Paris agglomeration controlled its expenditure while also continuing its investment programme.

04

A well-managed budget, a functional organisation



Service charge variations since 2001
(per tonne of waste processed)



The 6% annual increase in the service charge has been decided by the Board to cover significant cost overrun incurred in 2006 and 2007 as a result of the temporary management of household waste processed at Issy 1.

Rigorous management

A slight fall in expenditure despite exceptional cost overrun

Between 2005 and 2006, operating expenditure fell slightly, from €279.8 million to €279 million. Two facts lie behind this fall:

› the absence of interim payments:
in 2005, SYCTOM had to set aside €17million to prep are for the temporary management and establishment of a waste transfer to the Issy 1 centre pending the Isséane centre becoming operational;

› the reduction of one-off expenses: the 2005 budget included one-off expenses, mainly the cancellation of more than €20 million of revenue linked to the dispute over the abandoned Vitry project.

The operating contract burden for the various waste processing units rose by 18% by comparison with 2005. It accounts for the biggest source of expenditure at €209.1m, or 75% of total operating costs. This anticipated rise was above all due to the impact of operating the household waste transfer project to Issy 1. The continuing high price of fossil fuels also increased the cost of treatment and transport service provisions.

The financial aid paid by SYCTOM to local authorities in order to develop selective collections (€19m in 2006) increased by 13% compared with 2005 because of the increased volumes being recycled (+8%) and the service charges (6%). Aid includes the of €45.73 per tonne received in the waste sorting centres and the repayment of the service charges of €80.16 per tonne on the same tonnages.

Financial costs increased by 3% on 2005, as a result of the €145m in new loans taken out in 2005 to finance the investments made by the Syndicate (above all Isséane). These costs include loan interest payments, overdraft interest and accrued interest not yet paid.

The depreciation of capital assets rose to €15.1m compared with €13.4m in 2005, taking into account the investments made and requiring repayment.

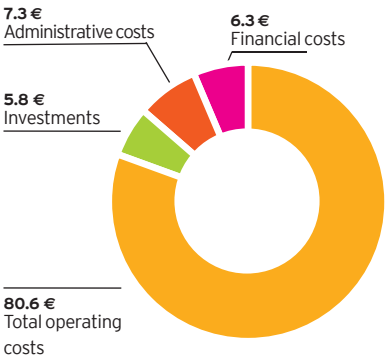
Human resources costs, which in relative terms still account for less than 2% of the budget, amounted to €5.4m, with a stable workforce of 115 employees responsible for the implementation and running of projects, monitoring operators' activity and managing the company. In 2006 employees took up posts which had remained vacant in 2005.

Finally, **administrative costs** rose significantly, and included insurance and electricity costs on the Isséane construction works.

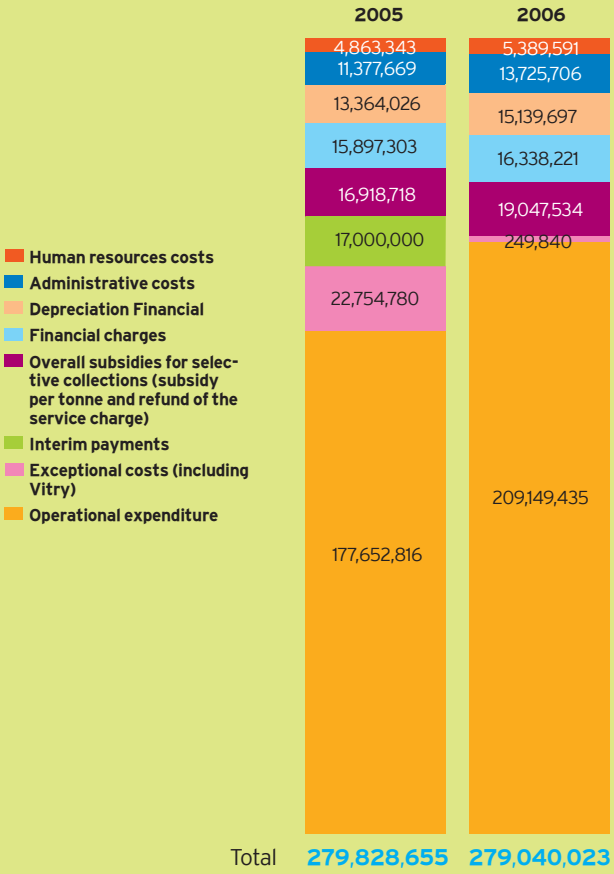
Continuing with the investment programme

The investment budget decreased from €267m to €191m. This reduction was due in particular to the fact that expenditure relating to bringing the Saint-Ouen and Ivry-Paris XIII energy recovery plants into compliance was no longer necessary, and to lower construction costs on the Isséane site.

Breakdown of expenditure for every €100 service charge

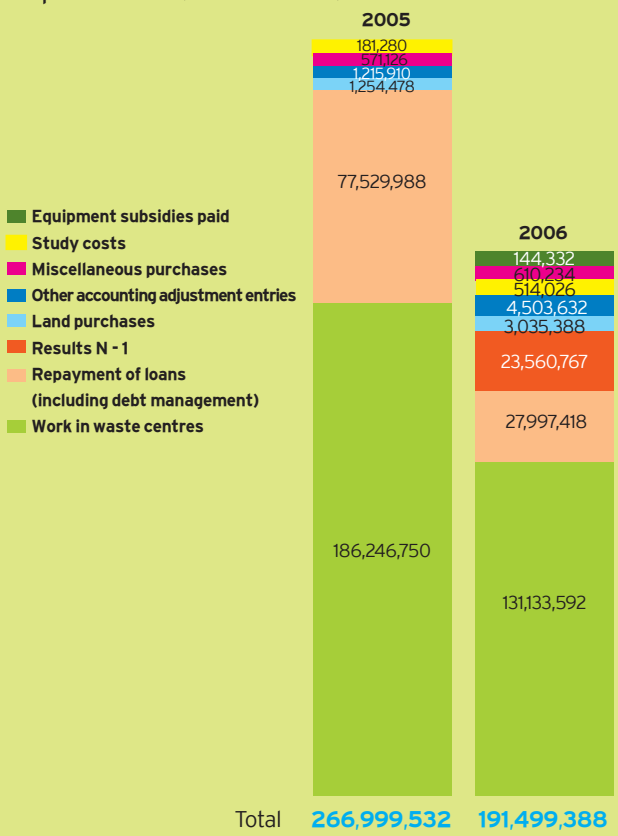


Operational expenditure (in € tax included)



	2005	2006
Total	279,828,655	279,040,023

Investment expenditure (in € tax included)



	2005	2006
Total	266,999,532	191,499,388

Operational income (en € TTC)

Compte administratif	2005	2006
Contributions from member local authorities	218,733,542	233,581,213
Allocations, subsidies (including EcoPackaging) and contributions	11,375,692	13,089,621
Other products from running management (including marketing of sorted products)	19,967,784	18,406,078
Releases of provisions	-	17,000,000
Exceptional products	2,319,138	1,709,344
Resultat N - 1	30,951,837	3,519,142
Total	283,347,992	287,305,398

Investment income (en € TTC)

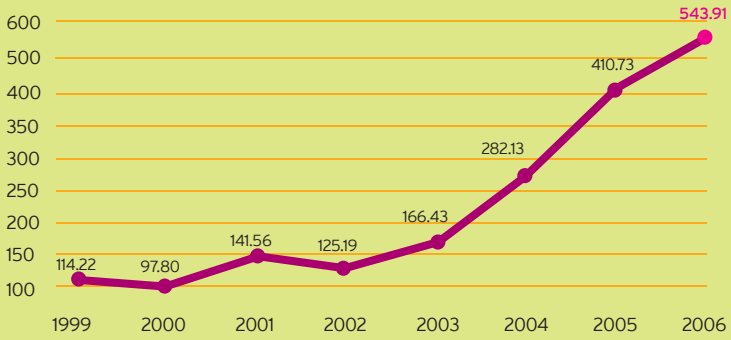
Compte administratif	2005	2006
Loan repayments (including debt management and accrued interest)	208,032,972	161,179,597
Subsidies	9,644,013	10,099,749
FCVAT	10,280,425	23,726,180
Depreciation of assets + costs to be spread	13,364,026	15,139,697
Provision	17,000,000	-
Other accounting adjustment entries		867,617
Reserves and result N - 1	2 117,328	-
Total	260,438,765	211,012,840

The investment programme by site (in €m before tax)

Site	Nature of the programme	Période	Work financed in 2005	Work financed in 2006	Total investment
Isséane	Processing centre	1998-2007	120.83	92.78	540.30
Ivry-Paris XIII	Smoke scrubbing	2003-2007	23.68	4.92	47.20
Ivry-Paris XIII	Bringing up to standard and continuous improvement	2004-2006	0.11	1.21	1.34
Saint-Ouen	Smoke processing and bringing the plant into compliance with the decree of 09/22/2002	2001-2007	7.67	2.73	40.17
Saint-Ouen	Bringing up to standard and continuous improvement	2006		0.04	0.04
Nanterre	Sorting centre	1999-2006	0.37	0.14	20.21
Romainville	Sorting centre	2004-2006	0.12	0.27	0.59
Sevran	Sorting centre	2003-2008	1.35	3.08	15.50
Paris XV	Sorting centre	2004-2009	0.19	0.26	27.91
Studies and misc. works		2004-2006	0.30	0.12	0.47
Romainville	Sorting/methanization centre	2005-2012	0.003	2.79	119.79
Blanc-Mesnil–Aulnay-sous-Bois	Methanization centre/slurry treatment	2006-2012		0.05	42.59
Issy 1	Transfer centre	2005-2007	2.25	3.26	5.56
Total			156.88	111.66	861.67

The changing levels of SYCTOM debt

(in millions of Euros, figures as of the 31 December of each year)



Loans taken out to finance SYCTOM projects, such as Isséane, and the methanization plants.

Work in waste centres accounts for the largest proportion of the budget (€131m), along with, in particular, the continuing construction work at Isséane. More than €3m was also spent in 2006 on the purchase of land at Romain-ville for the construction of the planned methanization plant.
Study costs recorded a significant rise by comparison with 2005, reaching €610,000. This money was mainly spent on studies relating to Isséane and the planned methanisation plants at Romainville / Bobigny and Blanc-Mesnil / Aulnay-sous-Bois. SYCTOM also continued to support the construction of waste collection centres by member local authorities (€144,000).

Increasing revenue

In return for waste processing, each member local authority pays SYCTOM service charge of €80.16 per tonne of waste processed and a contribution per resident of €6.28. In accordance with the mandature agreements, the rise in the service charges has been maintained below the limit of 6% by comparison with 2005 in order to finance the significant cost overrun generated in 2006 and 2007 by the temporary management of waste previously processed at the Issy-les-Moulineaux recovery centre. Totalling €233.6m, or 81% of total income, these service charges form the principal source of the Syndicate's operating income.
Another source of income, **the sale of products** from the recovery of waste, only fell slightly in 2006 (€18.4m compared with €19.9m in 2005) despite the halt in energy recovery activity at Issy-les-Moulineaux. The reason for the stability of this income stream is the high increase in income generated by the materials recovered from sorting.
Furthermore, **the direct contributions** paid by Éco-Emballages in the framework of the D scale returned €13.1m in 2006, €1.7m more than in 2005, taking into account the increased tonnages sorted in 2006 and the material and energy recovery objectives set by SYCTOM for its operators. Budgetary implementation in 2006 also recorded the return to operating funds of the interim payment of €17m made in 2005 in order to finance the expenses involved in transferring waste to the Issy 1 plant.

Optimized debt management

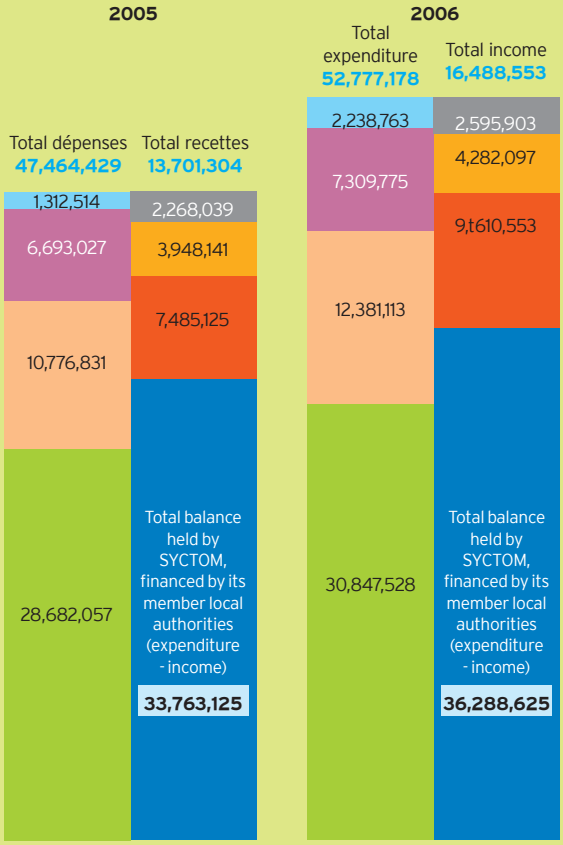
At December 31th 2006, outstanding debt had risen to €543.9m, compared with €410.7m at December 31th 2005. This rise is linked to the new loans taken out to finance facilities. The average maturity of the residual debt is 26.8 years, with an average interest rate of 3.57%. It has reached 54% at fixed rate with an average rate of interest of 3.72% and 46% at variable rate with an average rate of 3.40%.
During 2006, SYCTOM continued to manage its debt optimally in order to limit the burden of annuities. Loans were taken out over the long term (30 years), at a fixed or variable rate depending on the best market conditions at the time and reducing the risk of excessive rate variation as far as possible. While investments are mostly financed by loans (76.3% of investment revenue in 2006), SYCTOM was able to reduce this requirement in 2006 by collecting other income: advances on investment subsidies of €10m (€9.6m in 2005) and a grant from the VAT compensation fund of €23.7m (€10.3m in 2005).

Processing costs in current Euros (estimations)

	2005	2006
Operating expenses, administrative account (DF)	279,828,635	279,040,023
Total tonnages processed (T)	2,483,479	2,491,498
Gross cost of waste processing (€ per tonne) (= DF / T)	112.68*	112.00

Cost of processing selective collections

A stable cost, with costs and income rising.



Tonnages processed: 142,543 or **€236.91** per tonne

Tonnages processed: 154,455 or **€234.95** per tonne

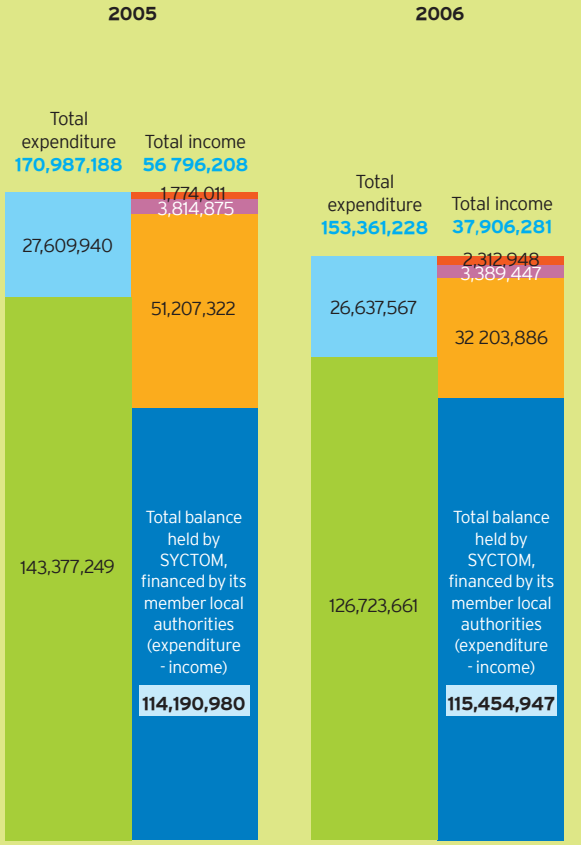
Expenditure
- Depreciation and financial costs
- Total support to authorities
- Exemption from the subscription
- Operational costs tax included (including sorting rejects management)

Income
- Sale of packaging materials to channels
- Sale of newspapers and magazines
- Support from EcoEmballages

The new calculation method for 2006 includes the aid granted by SYCTOM to its member authorities to develop selective collections (€19.7m in 2006). Without this incentivising policy, operating expenditure would be €107.46 per tonne in 2006 (and €114.33 per tonne in 2005).

The cost of incineration with energy recovery

Rising, taking into account the temporary management of waste at Issy 1 and the cost of smoke processing at Ivry and Saint-Ouen.



Tonnages processed: 1,929,084 or **€59.19** per tonne

Tonnages processed: 1,518,802 or **€76.02** per tonne

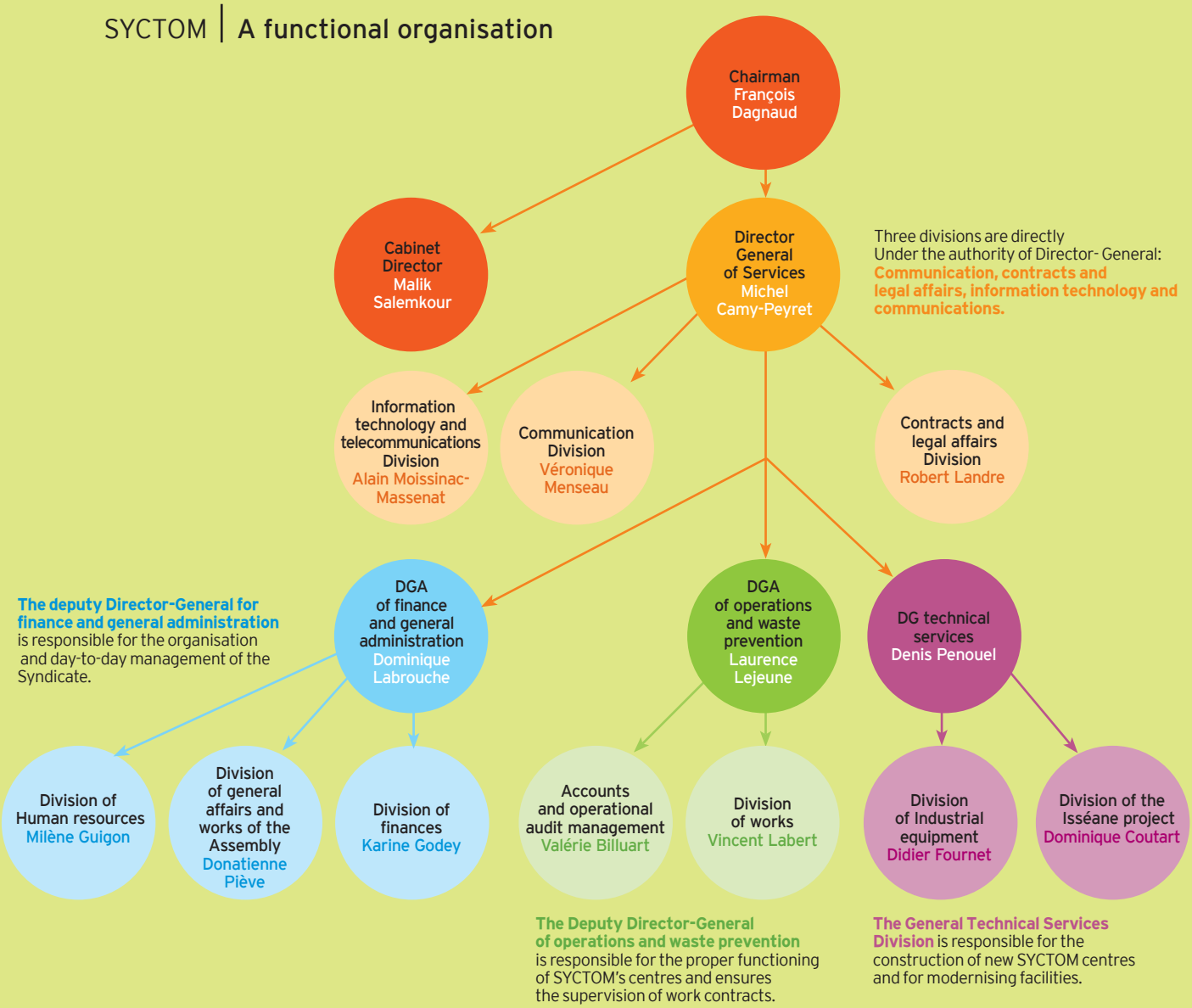
Expenditure
- Depreciation and financial costs
- Operational costs tax included (including processing of residues and clinkers and transfer to HWIU)

Income
- Income from recovery of sub-products from clinkers tax included
- Support from Eco-Emballages for energy recovery incl. tax
- Energy income tax included (sale of steam and electricity)

This cost increased in 2006 for a number of reasons: temporary waste management at Issy 1, redeveloped as a transfer centre, and the cost of processing smoke at Ivry and Saint-Ouen led to increased operating costs and to lower income generated by energy recovery.

Furthermore, in 2006, the cost of processing bulky items was €107.82 per tonne (€104 in 2005) and the cost of landfill was €91.87 per tonne (€88.63 in 2005).

* Definitive figure which cancels and replaces the provisional figure in the 2005 annual report.



A functional organisation

The **Syndicate committee** is the Syndicate plenary body where all the important decisions are made. More than one local authority in two (44 out of 85) takes part in SYCTOM works and the Committee brings together **68 representatives** appointed by the member local authorities:

› 24 representatives of the City of Paris;
› 14 delegates from SYELOM (Hauts-de-Seine);
› 14 delegates from SITOM93 (Seine-Saint-Denis);
› 3 delegates representing the Val-de-Marne local authorities;
› 3 delegates representing the Yvelines local authorities. The Syndicate Committee elects Vice-Chairmen.

It defines Syndicate policy, votes the budget and decides on works to pursue. It particularly adjudicates on requests for membership and withdrawal made by local authorities. The Committee can delegate its powers to the **Bureau**, composed of **36 members**.

The administrative team

SYCTOM employs **115** technical and administrative public agents from the civil service or the City of Paris. These staff are needed to implement all the Syndicate's initiatives in the areas of waste processing and prevention. The 6 SYCTOM divisions are under the authority of the Director General of Services.

Meeting of the committee's elected members.

The main decisions made by the Committee in 2006

In 2006, the Committee met four times and made several strategic decisions in accordance with the sustainable development initiative it is committed to.

› **Constructing the first biological processing plant** for household waste by methanization in Romainville / Bobigny, with the launch of a design, construction and exploitation contract. planned sorting and methanization plant will replace the existing facility.

› **Defining the schedule for the second planned biological processing plant** for household waste and water-purification slurry in the Blanc-Mesnil - Aulnay-sous-Bois industrial zone, in an innovative partnership initiative with the SIAAP (Interdepartmental Syndicate for the Decontamination of the Paris agglomeration). This project will be carried out in the framework of a project management agreement.

› **Improving the quality of atmospheric emissions from Isséane** by launching a high-performance smoke processing market. The aim is to provide better environmental guarantees taking into account the changes made to the town-planning rules by the Council of Issy-les-Moulineaux, which allow the construction of tall buildings.

› **Facilitating the signature of the operating contract for the Isséane centre** in the framework of a public services contract procedure: the TIRU-SITA group following competitive tendering between companies in the sector.

› **Planning for the future of Ivry-Paris XIII**: since 2003, consultations have been ongoing with representatives of the Councils of Ivry-sur-Seine and Paris on the question of the future (after 2015) of this site, which currently The processes 730,000 tonnes of household waste by incineration each year. For the new project, SYCTOM would like to increase the range of recovery methods used, reduce the tonnages processed and consolidate the use of alternatives to road transport. The Committee initiated studies to examine the technical feasibility and operability of these proposals given the restrictions of the present site.

› **Increasing the use of river transport for materials.** A project to transport materials sorted from selective collections in all waste sorting centres was launched. SYCTOM also aims to construct new river transport centres for bulky items at Paris XIII-Tolbiac and Romainville-Bobigny.

› **Developing the recovery of used textiles**, with the signing of agreements with actors in these areas...

›**...And beginning a major public awareness-raising campaign** in partnership with member local authorities to increase the collection of e-waste when new devices are bought (“one for one” collection).

The call for tender commission

Its role, in accordance with the public contracts code, is to verify the validity of candidatures and the competitiveness of the tenders made, before allocating these contracts. Placed under the authority of the Chairman of SYCTOM, it is made up of five members elected by the Committee and met 22 times during 2006.
Since September 2006 it has implemented the new public contracts code (decreed on 1 August 2006).

The 68 members of the SYCTOM Committee in 2006

François DAGNAUD
Chairman
(75)

Yves CONTASSOT
Vice-Chairman
Deputy Mayor
of Paris (75)

Nicole AZZARO
Vice-Chairman
Paris Councillor
(75)

Jérôme COUMET
Paris Councillor
(75)

Jean-Charles
BARDON
Paris Councillor
(75)

Roxanne DECORTE
Paris Councillor
(75)

Jean-Didier
BERTHAULT
Paris Councillor
(75)

Laurence DOUVIN
Paris Councillor
(75)

Geneviève
BERTRAND
Paris Councillor
(75)

François FLORES
Paris Councillor
(75)

Michel BULTE
Vice-Chairman
Paris Councillor
(75)

Pierre GATIGNON
Vice-Chairman
Paris Councillor
(75)

Jeanne CHABAUD
Paris Councillor
(75)

Brigitte KUSTER
Paris Councillor
(75)

Lyne COHEN-SOLAL
Vice-Chairman
Deputy Mayor
of Paris (75)

Élisabeth LARRIEU
Paris Councillor
(75)

Alain LE GARREC
Paris Councillor
(75)

Pierre MANSAT
Deputy Mayor
of Paris (75)

Géraldine MARTIANO
Paris Councillor
(75)

Sophie MEYNAUD
Vice-Chairman
Paris Councillor
(75)

Christophe
NAJDOVSKI
Paris Councillor
(75)

Cécile RENSON
Paris Councillor
(75)

Gérard REY
Vice-Chairman
Paris Councillor
(75)

Pierre SCHAPIRA
Deputy Mayor
of Paris (75)

Daniel BERNARD
Deputy Mayor
of Bagnolet (93)

Josiane
BERNARD
Deputy Mayor of
Bagnolet (93)

Danielle BRICHOT
Deputy Mayor of
Bagnolet (93)

Jean-Pierre COMTE
Deputy Mayor
of Drancy (93)

Michel DEBAILLY
Deputy Mayor
of Drancy (93)

Gérard GAUDRON
Vice-Chairman Mayor
of Aulnay-sous- Bois
(93)

Bernard LABBÉ
Vice-Chairman
Aulnay-sous-Bois
Municipal Councillor
(93)

Jean-Philippe
MALAYEUDE
Adjoint au Maire
de Neuilly-Plaisance
(93)

Claude PERNES
Vice-Chairman
Mayor of
Rosny-sous-Bois
(93)

Michel PRIN
Deputy Mayor of
Sevran (93)

- Representatives of the City of Paris
- Delegates of SITOM93 (SeineSaintDenis)
- Delegates of SYELOM (HautsdeSeine)
- Delegates representing the Val-de-Marne local authorities
- Delegates representing Yvelines local authorities

* Members of the Bureau in 2006.

* Henri REIN
Neuilly-sur-Marne
Municipal Councillor
(93)

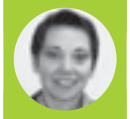
Sylvain ROS
Aubervilliers
Municipal
Councillor (93)

* Alain ROUAULT
Vice-Chairman
Chairman of
SITOM93
Deputy Mayor of
Saint-Ouen (93)

* Gérard SAVAT
Vice-Chairman
Deputy Mayor of
Pantin (93)

* Jean-Pierre AUFFRET
Vice-Chairman
Deputy Mayor of
Clichy- la-Garenne (92)

* Christiane BAUDAT
Deputy Mayor of
Suresnes (92)



Christine BOURCET
ADeputy Mayor of
Nanterre (92)

Michel
de LARDEMELLE
Deputy Mayor of
Levallois-Perret
(92)

Éric FLAMAND
Deputy Mayor of
Vaucresson (92)

Jean-Paul GAUDIN
Ville-d'Avray
Municipal Councillor
(92)

* Jacques GAUTIER
Vice-Chairman
Chairman of SYELOM
Mayor of Garches
(92)

* Alain JULIARD
Boulogne-Billancourt
Municipal Councillor
(92)

* Dominique LAFON
Deputy Mayor
of Fontenay-aux-
Roses (92)

* Hervé MARSEILLE
Mayor of Meudon
(92)

* Olivier MERIOT
Vice-Chairman
Deputy Mayor of
Gennevilliers (92)

Jean-Loup METTON
Mayor of Montrouge
(92)

* André SANTINI
Vice-Chairman
Deputy-Mayor of
Issy-les-Moulineaux
(92)

* Hervé SOULIÉ
Deputy Mayor of
Saint-Cloud (92)

* Alain AUDOUBERT
Mayor of
Vitry-sur-Seine (94)

* Jean-Marie
BRETILLON
Mayor of
Charenton-le-Pont
(94)

Christian CAMBON
Mayor of Saint-
Maurice (94)

Séverine
de COMPREIGNAC
Deputy Mayor of
Joinville-le-Pont (94)

* Pierre GOSNAT
Vice-Chairman
Mayor of
Ivry-sur-Seine
(94)

* Roger JOUBERT
Vice-Chairman
Maisons-Alfort
Municipal Councillor
(94)

* Jean-Yves
LE BOUILLONNEC
Deputy-Mayor
of Cachan (94)

Jérôme LE GUILLOU
Deputy Mayor of
Kremlin-Bicêtre (94)

Franck PERILLAT
Deputy Mayor
of Villejuif (94)

Dominique PICARD
Saint-Mandé
Municipal Councillor
(94)

Michel PRA
Gentilly Municipal
Councillor (94)

Jean-Michel SEUX
Deputy Mayor of
Vincennes (94)

Daniel TOUSSAINT [1]
Mayor of Valenton
(94)

[1] Replaced on 20 December 2006 by Françoise BAUD,Deputy Mayor of Valenton (94).

Gérard MEZZADRI
Delegate
from the Grand Parc
Federation of
municipalities (78)

Guy RECHAGNIEUX
Deputy Mayor of
Chesnay (78)

* Raymond ROUX
Vice-Chairman
Deputy Mayor of
Vélizy-Villacoublay
(78)

Chiffres clés 2006 (1)

The figures in brackets refer to 2005 data

Total tonnage of household waste on SYCTOM territory
2,653,916 t
(2,671,110 t)

Waste processed by SYCTOM
2,491,498 t
(2,483,479 t)

Annual budget: €470,54m

Service charge: €80.16 per tonne processed
€6.28 per resident

Human resources
at 31/12/2006:
SYCTOM: 115 employees
Private operators of SYCTOM processing centres:
667 employees, of which
TIRU: 320
Veolia Propreté: 270
SITA: 77

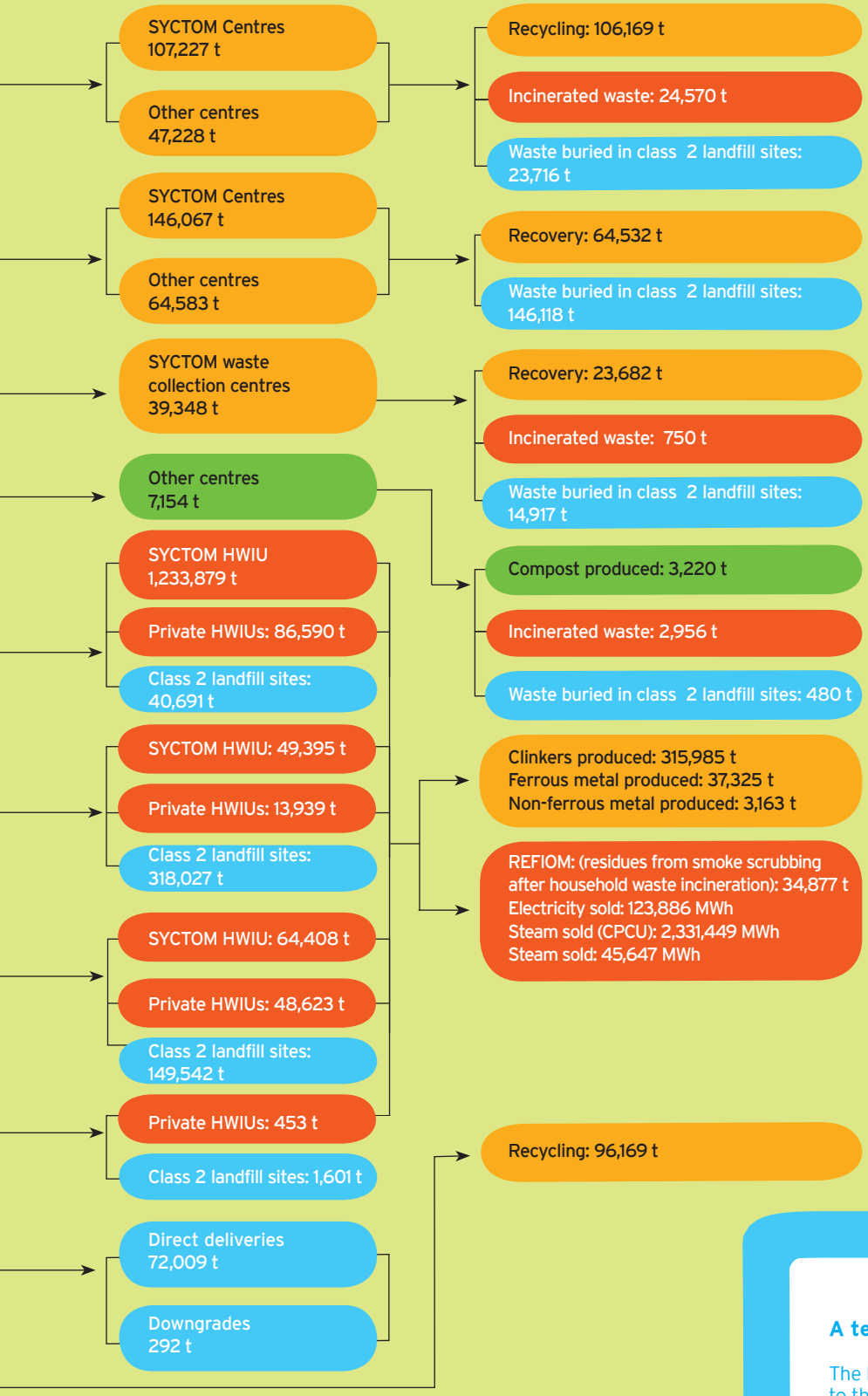
All residents recycle in the 85 municipalities

- Sorting and recycling of selective collection
  154,455 t
  (142,513 t)
- Sorting of bulky items
  210,650 t
  (199,602 t)
- SYCTOM waste collection centres
  39,348 t
  (40,375 t)
- Composting
  7,154 t
  (3,910 t)
- HWIU direct deliveries
  1,361,160 t
  (1,693,166 t)
  inclu. downgrades
  3,311 t
- Romainville transfers
  Direct deliveries
  379,325 t
  (340,009 t)
  inclu. downgrades
  10,650 t
- Issy transfers
  Direct deliveries
  265,050 t
  (0 t)
- Arcueil and Nicollin transfers (following Issy fire)
  Direct deliveries
  2,053 t
  (0 t)
- Burial of household waste in class 2 landfill
  72,301 t
  (55,979 t)

Glass
96,283 t
(101,249 t)
→ Not passing through the SYCTOM system: 93,408 t
Passing through the SYCTOM system: 2,875 t

Waste from municipal councils not sending waste to SYCTOM
66,135 t (86,382 t)
→ Not passing through the SYCTOM system

(1) These figures were finalised on April 19th 2007. Given the timeframes involved, some values must have been published without being formally validated by all SYCTOM partners.



Total materials recovery
647,025 t
(of which clinkers 315,985 t and glass 96,169 t)

Or 25 % of waste

Total organic materials recovery
3,220 t

Total energy recovery
(HW + downgrades + sorting rejects)
1 525,563 t

Or 45 % [2] of waste

Total SYCTOM buried in class 2 landfill sites
(HW + downgrades)
581,870 t

(HW + downgrades + sorting rejects)
767,393 t

Or 30 % of waste

[2] Ferrous and non-ferrous clinkers are materially recovered. In order to avoid a double count, this percentage was calculated by subtracting these materials from the total energy recovery tonnages.

A temporary situation

The high quantity of waste landfilled in 2006 is linked to the end of incineration activity at Issy-les-Moulineaux, which led to reduced energy recovery capacities in the Syndicate. Activity was scheduled to end on December 28th 2005, but was extended at Issy 1 until February 22th 2006 at the request of the State in order to provide heating for around 5000 homes and a number of public and private facilities. Since February 23th 2006, this centre has been converted into a temporary waste transfer centre and will fulfil this role until the Isséane centre comes into service. The waste received is redirected to other centres in the Ile-de-France region and to a lesser extent in the Oise, where it is mainly landfilled but also incinerated.

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

(in application of decree no. 2000404 of 11 May 2000)
Technical and financial indicators for 2006

Processing centres mobilized by SYCTOM

SYCTOM centres and tonnages processed in 2006

3 incinerators with energy recovery
- **Issy-les-Moulineaux** (capacity: 540,000 t, 2006 quantities: 70,041 t);
- **Ivry-Paris XIII** (capacity: 730,000 t, 2006 quantities: 663,429 t);
- **Saint-Ouen** (capacity: 630,000 t, 2006 quantities: 629,928 t).

3 selective collection sorting centres
- **Nanterre** (capacity: 40,000 t, 2006 quantities: 32,452 t);
- **Ivry-Paris XIII** (capacity: 36 300 t, 2006 quantities: 36,076 t);
- **Romainville** (capacity: 45,000 t, 2006 quantities: 38,698 t).

2 bulky item sorting centres
- **Saint-Denis** (capacity: 60,000 t, 2006 quantities: 66,774 t);
- **Romainville** (capacity: 45,000 t, 2006 quantities: 79,292 t).

2 transfer centres
- **Romainville** (capacity: 350,000 t, 2006 quantities: 379,325 t);
- **Issy-les-Moulineaux** (capacity: 320,000 t, 2006 quantities: 271,498 t).

3 waste collection centres
- **Ivry-Paris XIII** (2006 quantities:4,770 t);
- **Saint-Denis** (2006 quantities: 8,650 t);
- **Romainville** (2006 quantities: 25,929 t).

The Romainville sorting centre.

SYCTOM centres and tonnages processed in 2006

Incinerators with energy recovery
- **Massy** (Curma) 5,041 t ;
- **Rungis** (Généris) 3,111 t;
- **Argenteuil** (Novergie) 61,377 t;
- **St-Thibault-des-Vignes** (Novergie) 30,052 t;
- **Monthyon** (Généris) 5,535 t;
- **Saint-Ouen-l'Aumône** (Généris) 9,039 t;
- **Carrières-sur-Seine** (Novergie) 20,752 t;
- **Créteil** (Novergie) 16,821 t;
- **Other centres** 3,849 t.

Waste sorting centres
- **Arcueil** (SITA) 34,749 t of BI;
- **Ivry** (Revival) 15,513 t of BI;
- **Ivry - Blanc-Mesnil** (Paprec) 15,153 t of SC;
- **Gennevilliers** (SITA) 11,912 t of SC;
- **Buc** (Nicollin) 14,321 t of BI and 6,999 t of SC;
- **Chelles** (Généris) 7,776 t of SC;
- **Rungis** (SIEVD) 5,388 t of SC.

Composting unit
- **Triel-sur-Seine** (Généris) 7,154 t.

Landfill centres
- **Class 1 landfill Villeparisis** (SITA) 29,966 t of REFIOM;
- **Class 2 landfill Claye-Souilly** (REP) 506,506 t;
- **Class 2 landfill Isles-les-Meldeuses** (Sablières Capoulade) 64,132 t;
- **Class 2 landfill Bouqueval** (REP) 48,794 t;
- **Class 2 landfill Crépy-en-Valois - Liancourt-Saint-Pierre** (SITA) 48,414 t;
- **Class 2 landfill Soignolles** (SITA) 25,278 t;
- **Class 3 landfill Claye-Souilly** (REP) 35,816 t;
- **Other class 2 landfill** 62,521 t.

Overall annual report

Number of local authorities in the SYCTOM district	Number of inhabitants in the SYCTOM district	Gross tonnage of waste			Selective collections			Service charges	
	1999 census and supplementary censuses up to 2006	Household waste, sweepings, green waste	Bulky items	NHIW	Newspapers and magazines, multimaterials, paper-cardboard	Glass	Waste collection centres	Per capita	Per tonne
85 local authorities	**5,481,300 in 85 local authorities**	**2,086,274 t or 380.6 kg/pers/year**	**210,650 t or 38.4 kg/pers/year**	**770 t**	**154,455 t or 28.18 kg/pers/year**	**2,875 t**	**39,348 t**	**€6.28**	**€ 80.16**

Expenditure and income

Operating conditions of the elimination service awarded to SYCTOM de l'agglomération parisienne	Public contracts
Total annual expenditure on waste processing by SYCTOM (total real expenses in the general fund of the 2006 Administrative account)	€263,768,714
Financing conditions for the overall processing service	Contribution from local authorities, Éco-Emballages support for selective collections, sale of products
Conditions for establishing the special service charge for the elimination of assimilated products	Not applicable
Annual total of main service provisions paid by contract in €m incl. tax	€181.3m incl. tax
Overall cost, per tonne of waste collected, of the bulky item collection service (processing or storage) and including transport and landfill of sorting rejects	€107.82 per tonne
Overall cost of processing selective collections	€234.95 per tonne
Overall cost of incineration with energy recovery	€76.02 per tonne
Cost of landfill	€91.87 per tonne
Income from access rights to processing and storage centres at which the local authority is the works supervisor for assimilated waste	Not applicable
Repayment under selective collections	€ 45.73/t multimaterials without glass, € 45.73/t newspapers and magazines, office papers, € 30.49/t multimaterials with glass, € 30.93/t re-sorted SC, repayment of service charge € 80.16/t from SC
Itemised amount of aid received from certified bodies: support per sorted tonne	€ 13.090m

Recovery

Recovery from incineration	Multi-material recovery	Recovery of bulky items	Recovery in waste collection centres	Recovery unit of composting	Class 2 landfill site
Electricity: 123,886 MWh, Steam: 2 377,096 MWh, Clinkers: 315,985 t, Ferrous: 37,325 t, Non-ferrous: 3,163 t	106,169 t of plastic, paper-carboard, newspapers & magazines, steel and aluminium, small electrical appliance	64,532 t of wood, scrap metal, large carboards	23,682 t	3,220 t	767,393 t

Material recovery following sorting (in € before tax): Newspapers/magazines: €3.37m - Plastics: €0.82m - Cardboard EMR (Recyclable domestic packaging): €0.70m - Industrial papaer: €0.06m - Steel: €0.41m - Office paper: € .19m - Aluminium: €0.50m - Packaging: €0.003m - Glass: €0.003m - Nonferrous: €0.003m

Material recovery from incineration (in € before tax): Scrap metal: €0.64m Clinker aluminium: €0.43m Large scrap metal and other: €0.06m

TOTAL income from materials recovery: €7.2m per tonne

HWIU energy recovery in direct sales SYCTOM Issy 1 (en € before tax): Steam: €1.936m Electricity: €0.152m

TOTAL income from energy recovery: €2m per tonne

Measures taken during the year to prevent or mitigate harm to public and environmental health: discharge treatment equipment brought into service and two HWIU's at Ivry-Paris XIII and Saint-Ouen brought into compliance with the decree of 20 September 2002.

SYCTOM partners

A number of public and private partners work alongside SYCTOM and support it in fulfilling its public service mission:
State services, public bodies, local authorities and companies.

› **The European Union** is implementing a common policy with regard to the environment. It acts, particularly, in the field of waste management. Its directives are adapted into French law by the State.

› **The Ministry for the Environment and Sustainable Development** defines the major objectives for waste management and sets the standards to be complied with in line with European regulations. The Ministry also sets Ademe's budget and certifies bodies given responsibility for managing the specific recycling channels (packaging, batteries, e-waste, and so on).

› **Ademe** (Agency for the Environment and Energy Management) is a public agency under the authority of the Ministries responsible for the Environment and Sustainable Development, and for Industry and Research. It helps local authorities to make progress in the area of sustainable development, especially with regard to waste management, and provides financial support for their projects.

› **The Prefects** grant the operating licenses to waste processing.
They are also responsible for setting up Local Commissions for Information and Surveillance (CLIS), which they chair and of which they determine the make-up, in order to monitor plants' energy recovery activities within their departments.

› **The Ile-de France Regional Authority** is one of SYCTOM's most important partners. Since 2005, and the law concerning local freedoms and responsibilities, it has been responsible for drawing up a regional waste elimination plan. Following a collaboration undertaken in 2006, the implementation of PREDMA is scheduled for 2009. The Region also provides investment income to the Syndicate in the framework of the Terres vives contract which Ademe is also involved in.

› **The General Councils** draw up or help to draw up, with the Prefects, the departmental plans for the elimination of household waste and monitor them until they are implemented at regional level.

› **SYELOM and SITOM93,** the two SYCTOM member primary syndicates carry out the Syndicate's actions in the Hauts-de-Seine and Seine-Saint-Denis departments and undertake actions on the ground. They also provide information, coordination and help in decision-making and monitoring selective or specific collections to member local authorities.

› **Éco-Emballages, a private company certified by the State**, supports the establishment and development of the selective collection, sorting, recycling and recovery of energy from household packaging. It receives a financial contribution from the companies which manufacture and market packaged products for household consumption and redistributes most of them to local authorities. In 2006, SYCTOM received €13.1m from Éco-Emballages.

› **CPCU (Paris Urban Heating Company) and EDF** buy the steam and electricity produced in SYCTOM's three incinerators.
In 2006, the Syndicate sold 2 331,449 MWh of steam and 123,886 MWh of electricity, for a total sum of €32.2m.

› All SYCTOM centres are operated by private firms, employed following calls for tender.
TIRU operated the energy recovery plants, and was contracted in 2006 to run Isséane. **Généris** (subsidiary of Veolia Propreté) operates the Romain-ville, Saint-Denis and Nanterre waste sorting centres. **SITA** operates the Ivry-Paris XIII waste sorting centre.

› In order to add to its processing capacity, SYCTOM uses services provided by external centres operated by contractors:
SITA operates the selective collection sorting centre in Gennevilliers, the bulky items unit in Arcueil and the class 1 landfill centre in Villeparisis. **Généris** operates the waste sorting centre in Chelles and the incinerators in Monthyon and Saint-Ouen-l'Aumône.
Nicollin operates the Buc sorting centre, **Valor Industries** the centre at Blanc-Mesnil, **SIEVD** the Rungis centre and **Revival** the centre at Ivry. **Novergie** operates the energy recovery centres in Argenteuil, Saint-Thibault-des-Vignes, Carrières-sur-Seine and Créteil.
Curma operates the Massy plant.

› Finally, two companies process the clinkers from the SYCTOM energy recovery centres: **MRF** and **YPREMA.**

Glossaire

Voluntary drop-off
Method of selective collection whereby sorted materials are placed for recycling in specific containers located in public places (this often applies to the collection of glass).

Biogas
Gas produced by the decomposition of organic materials sheltered from the air. This fermentation process occurs in nature and in landfills containing organic waste, and also in methanization processes. Biogas is mainly composed of methane and carbon dioxide.

Fly ash
Fine ash produced during the incineration of waste and contained in gases leaving boilers. It is captured along with dust at the first level of incineration-fume purification using electrostatic filters

CET (landfill centre)
Rubbish dump for the burial of waste in compliance with environmental criteria.
Storage centres are categorised into three categories, according to the nature of the waste which is placed in them: class 1 (dangerous waste), class 2 (non-(dangerous waste), and class 3 (inert waste).

Cogeneration
The production of steam and electricity using the heat recovered during the combustion of waste.

Selective collection
The collection of waste presorted by residents for recycling (packaging, newspapers and magazines, glass).

Electrical and Electronic waste (E-waste)
Waste from equipment which functions using electrical currents or electromagnetic fields, in other words all equipment which uses an electrical socket, a battery or a storage battery (rechargeable). The Ministerial decree of July 20th 2005 makes selective collection and processing of electrical and electronic waste compulsory.

Non-hazardous Industrial Waste (NHIW)
Waste from industry which can be processed in the same facilities as household waste.

Residual waste
Non-recoverable waste, residues from waste processing "which can no longer be processed in current technical and economic conditions, in particular by extracting the recoverable elements or limiting their polluting or dangerous character"
(law of 13 July 1992).

Dioxins
Generic name given to a family of toxic compounds which are part of the Halogenated Polycyclic aromatic Hydrocarbons (HPAHs) family. They are made up of atoms of carbon, hydrogen, oxygen and halogens (chloride, bromine, iodine, fluoride, etc.)

ELA
Packaging for drinks, such as brick packs.

EMR
Thin, light cardboard packaging for food (cake packets, outer packaging for yoghurts, etc).

Bulky or gigantic items
Household waste too voluminous to be put in a household bin (electrical appliances, furniture, mattresses, etc).

Fossil energy
Energy produced from oil, gas and coal; non-renewable residues from the fossilisation of living organisms in the earth's sub-soil in geological time. The combustion of these sources of energy generates greenhouse gases.

Greenhouse Gases (GHGs)
These contribute to the creation of a greenhouse effect which retains heat around the earth.
An over-concentration of GHGs causes climatic disturbances. They can be natural (carbon dioxide, methane and ozone) or produced by mankind (like carbon dioxide from burning fuels).

Incineration
Method of thermally processing waste by combustion which generates three types of residues: clinkers, ash and smoke-scrubbing residues.

Classified installations
Installations which can be the source of danger or pollutants and the operation of which is regulated.
We distinguish between those sites which must be declared to the Prefecture, and those subject to the Prefect's authorisation after a public enquiry, such as waste processing facilities.

Leachates
Water which, after percolating through waste stored in landfill, carries bacteria and chemicals. They are polluting and must be treated before they can be returned to the natural environment.

Clinkers or slag
Non-combustible residues produced at the outputs from incineration furnace. After ageing, they can be used in road works.

Heavy metals
Metals which, if accumulated in the environment, pose dangers for human health, such as lead, cadmium and mercury.

Methanization
A treatment leading to the production of biogas by the anaerobic decomposition of organic waste. It is a source of energy recoverable as a fuel.

PEHD (High-Density Polyethylene)
An opaque plastic material used in the manufacturing of packaging, such as bottles for household products, and which can be recycled to make pipes and hoses, shoe stiffeners, canisters, etc.

PET (Polyethylene Terephtalate)
Plastic material used particularly in the manufacturing of transparent bottles (for water or soft drinks). It can be recycled to make new bottles, containers, fibres, and filling for quilts, pillows, anoraks and soft toys.

REFIOM (Residues from smoke scrubbing after household waste incineration)
Residues from household waste incineration plants made up of dust removal residues and residues from the smoke scrubbing. They are treated to
be stabilised before being placed in Class1 landfill centres.

Sorting rejects (undesirables)
In a waste sorting centre, excessively dirty packaging or materials which cannot be recovered for recycling. It is extracted by the sorters of materials sent along recycling channels.

TOE (tonne of oil equivalent)
Measurement which allows for the comparison of all types of energy by reference to oil. For example:
1,200 litres of fuel oil = 1 TOE.

HWIU
Household waste incineration unit.

Recovery
Procedure which involves giving value back to waste by reusing the product (deposit), recycling, composting, regeneration (production of a new raw material) or in the form of energy.

Energy recovery
Procedure consisting of using the calories contained in waste, burning them to recover the energy in the form of heat, steam or electricity.

Materials recovery
The recovery of waste by using the materials composing it, like the regeneration of used oil, the recycling of newspapers/ magazines and packaging materials.

Organic materials recovery
The recovery of organic waste, for example by composting.

SYCTOM
DE L'AGGLOMERATION PARISIENNE

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