2008 ACTIVITY REPORT





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EDITORIAL

In the wake of the municipal elections, 2008 was characterised by the renewal of our Syndicate committee. Broadly renewed whilst preparing itself for the long term, SYCTOM of the Paris agglomeration began its new mandate on healthy foundations. The rigorous management of our finances allows the Syndicate to continue to meet the challenge of sustainable waste management focused on the future, despite the economic downturn. Inspired by the principle of responsibility to future generations, our strategic direction has been given further confirmation by the European waste directive of November 2008 and the Grenelle environment law which give priority to prevention, re-use, recycling and biological processing, whilst recognising the relevance of energy recovery.

Our actions are also echoed in the elaboration of a regional plan for waste disposal, which should be approved at the end of 2009 and in the implementation of Paris Metropole. Partners of all regional players in the field of waste, SYCTOM is the precursor of a global approach to the challenges and solutions for development in the Paris agglomeration.

The transformation of the Ivry-Paris XIII sorting and energy recovery centre, which



FRANÇOIS DAGNAUD Chairman of SYCTOM of the Paris agglomeration

MEET OUR COMMITMENTS FOR SUSTAINABLE DEVELOPMENT AND FULFIL OUR PUBLIC SERVICE MISSION will be begun after the public hearing currently being prepared by the Special public hearings commission, will form the major project of the decade, on a scale comparable to the Isséane centre which opened at the end of 2007. With the start-up of the sorting centre in Sevran, the construction of the first of the Parisian sorting centres and the launch of two methanisation projects, these projects demonstrate the Syndicate's priorities: to reduce the quantity of waste, diversify our recovery methods, adapt our processing capacities which are still deficient relative to our needs, and develop alternative means of transport.

Our management is focused on the long term. Our current decisions find their foundations in united choices, agreed on several years ago. And they commit SYCTOM for the future. Thus, for a period of over 20 years, from 1998 to 2022, over 2 billion euros has been earmarked for the creation of 4 organic and/or energy recovery centres and 9 centres for selective collection and bulky objects – the average lifetime of these installations is 30 years.

The downward trend for tonnage of waste processed which became more marked with the recession in 2008 validates our decision to reduce incineration capacities in our centres when they are overhauled.

It is under this condition that we can meet our commitments for sustainable development and fulfil our public service mission. The success of our projects will continue to be based on our ability to listen to our partners, to share our choices, on the quality of our projects, their processes and their urban and architectural integration, on the solidarity between our territories and of course the recognised professionalism of our teams.



BUSINESS INDICATORS

2.43 MILLION TONNES of waste processed by SYCTOM

	Sorting and re	ecycling		Materials recovery
,903 T	16 %	388,821 T	•	586,247 T
				of which
				Paper, cardboard, plastic,
.,436 T	Incineration			metal, recyclable wood 219,185 T
centres	70 %	1,697,783 T		Recoverable incineration
,482 T				Energy recovery
	Landfill		•	Steam 2,544,965 MWH
,875 T	14 %	337,380 T		Electricity 207,718 MWH
	903 T 2,436 T centres 0,482 T 0,875 T	903 T 16 % 16 % Incineration 10,482 T 70 % 10,875 T Landfill 14 %	16 % 388,821 T 16 % 388,821 T 16 % 388,821 T 16 % 388,821 T 1.436 T Incineration 70 % 1,697,783 T 1.482 T Incineration 1.482 T Incineration 1.482 T Incineration	16 % 388,821 T 16 % 388,821 T 16 % 388,821 T 1.436 T Incineration 70 % 1,697,783 T 9,482 T Landfill 14 % 337,380 T

* The percentages are calculated on the basis of tonnage directly entering each of the channels.



FINANCIAL INDICATORS

BUDGET	COST OF PROCESSING PER TONNE
Total expenditure €499,961,228	Selective collections
	Bulky objects
Functioning €323,332,371	Incineration with energy recovery
Investment €176,628,857	Landfill

Selective collections	
	€201.39
Bulky objects	
	€102.81
Incineration with energy recovery	
	€68.92
1	
Landfill	

2008 REFERENCE POINTS

HIGHLIGHTS

FEBRUARY

Launch of a project tender to promote waste reduction.

Allocation of a contract for the production and operation of the multi-channel centre in Romainville/ Bobigny to the Urbaser/Valorga/Cabinet S'Space group for a total of 410 million euros.



Agreement to a programme of works to extend the lifetime of the lvry-Paris XIII energy recovery centre.



Opening of the mandate and re-election of François Dagnaud as Chairman, during the investiture session of the Syndicate committee made up of the new representatives of the member local authorities of SYCTOM.



End of trials at Isséane and transfer of operations to TSI (Tiru, Sita, Isséane).

Launch of a procedure for a public contract for the design and creation of a multi-channel centre in Blanc-Mesnil/Aulnay-sous-Bois, built as co-developer with the SIAAP.



Appointment of Dominique Labrouche in the role of General Services Manager.

SEPTEMBER

Completion of feasibility studies for the creation of an energy and organic recovery centre at Ivry-Paris XIII combining methanisation and incineration processes.

Inauguration of the extension of the river transportation of newspapers and magazines to the Chapelle-Darblay site (Rouen) to all of SYCTOM's sorting centres (37,900 tonnes transported, i.e. 1,650 fewer trucks).



First meeting of the working group of officials to favour collective thinking within the Syndicate committee, on the challenges of the mandate.

OCTOBER

Beginning of the deployment of the new IT system for managing weighings developed to make information exchange more reliable and fluid between the Syndicate, its member local authorities and partners.

Allocation of a subsidy of 10,000 euros to the City of Paris for a pilot campaign carried out for the prevention of waste in the 11th arrondissement.



Allocation of a subsidy to the community of the Arc de Seine agglomeration for the creation by SYELOM of an inter-municipal waste reception centre in Meudon.



Start of the construction of the Paris XV selective collection centre after completion of an archaeological excavation. The open day for this site on 28 June attracted some 2000 persons.

The Assemblée Nationale adopts the bill known as "Grenelle 1" on first reading.



NOVEMBER

Organisation of a technical information meeting on the management of e-waste for member local authorities of SYCTOM, in liaison with OCAD3E and ADEME.

Start-up of a sorting centre in Sevran to process waste from selective collections from 10 municipalities in Seine-Saint-Denis and visit of the centre by residents on 29 November.

Publication of the revised framework directive in the Official Journal of the European Union relative to waste.

DECEMBER

Selection of project and project manager for the modernisation of the pre-sorting and river transfer of bulky objects centre in Saint-Denis after an architecture competition (group of companies managed by Inddigo agency).

Delegation given by the Syndicate committee to the Chairman of SYCTOM to refer the matter of the Ivry-Paris XIII to the National public hearings committee.

Vote by the Parliament on the 2009 finance law. The increase in the cost of the TGAP will generate 5 million euros in additional expenditure for SYCTOM in 2009.



SYCTOM IN BRIEF



SYCTOM of the Paris agglomeration is the ***engine** for environmental protection. Responsible for processing and recovering household waste for half of the Paris region, or some 10% of the national population, it contributes through its commitments and activities to promoting sustainable development on its territory.





A PUBLIC SERVICE MISSION

Created in 1984, SYCTOM of the Paris agglomeration (Syndicat intercommunal de traitement des ordures ménagères) is a public administrative establishment which now brings together 84 municipalities (85 municipalities in 2008) in the most densely-populated territory of France. It works for 5.5 million people in 5 départements: Paris, Hauts-de-Seine, Seine-Saint-Denis, Val-de-Marne and Yvelines.

Local authorities are members of SYCTOM either directly, via inter-municipal groupings, or by the intermediary of departmental syndicates (SITOM93 and SYELOM). They entrust it with the processing and recovery of the household waste which they collect.

SYCTOM also participates alongside its member local authorities in prevention campaigns and in public awareness programmes.

SPECIAL PARTNERS

SITOM93 (Syndicat intercommunal de traitement des ordures ménagères de Seine-Saint-Denis) and SYELOM (Syndicat mixte des Hauts-de-Seine pour l'élimination des ordures ménagères) respectively bring together 37 and 30 municipalities, members of SYCTOM. Their objectives include providing information, supporting decision-making and monitoring collections from their own members and managing waste reception centres. They entrust SYCTOM with the processing and recovery of their waste.

4 sources of supply

SYCTOM processes and recovers waste from 4 collection channels:

- paper and packaging from selective collections (with the exception of glass);
- residual household waste;
- bulky objects;
- waste taken to waste reception centres.



3 methods of recovery

SYCTOM diversifies its recovery methods depending on the characteristics of the waste.

SORTING

recycled materials

It sorts packaging, newspapers and magazines as well as bulky objects so that they can be transformed into recycled materials by industrial companies and can thus have a second life in a production process.

INCINERATION energy

The Syndicate incinerates everything in household waste. From the heat emitted, it produces steam and electricity for urban heating.



FTHANISATION

energy and compost

It implements a methanisation procedure for recovering biodegradable waste (green and food waste, cardboard and non-recyclable paper) to produce energy from the biogas emitted by fermentation and to create compost from the fermentation residue.

GOVERNANCE

LOCAL OFFICIALS AT THE SERVICE OF CITIZENS

Made up of 68 local officials, the Syndicate committee defines the policy of SYCTOM, votes on the budget, decides on works and on requests by local authorities for membership or withdrawal. It elects the 36 members of the Bureau, which prepares its deliberations.

A NEW MANDATE

SYCTOM'S Syndicate committee was renewed in 2008 for six years, after the municipal elections. Of the 68 permanent officials, 49 were newly elected in 2008 to SYCTOM's Syndicate committee. During its investiture session of 14 May, the committee unanimously re-elected François Dagnaud as Chairman of the Syndicate. The Syndicate committee has also renewed its 68

temporary officials.



The tender commission

It is made up of five members elected by SYCTOM and is under the authority of the Chairman of SYCTOM. In accordance with the code for public contracts, it ensures the validity of applications and the competitiveness of the offers before allocating the contracts. In 2008 it met 20 times.

PROMOTING COLLECTIVE THINKING

As the new Syndicate committee includes over 70% new officials, it seemed necessary to associate its members more closely with SYCTOM's functioning and to inform them on its management and direction. Open to everyone, on a voluntary basis, a working group was set up. It aims to be a place of information, exchange and thought, prior to the committee meetings. In September, it met for the first time to consider the challenges involved with the new mandate and their financial consequences.

ORGANISATION

In July 2008, Dominique Labrouche was appointed General Services Manager, replacing Michel Camy-Peyret.

A FUNCTIONAL ORGANISATION

The Syndicate committee relies on a team of 115 administrative and technical agents mostly from the civil service. The communication, IT and telecommunications, contracts and legal affairs departments report directly to the General Services Manager. Three other general departments are also under the authority of the Managing Director:

- The department for the operation and prevention of waste ensures the proper functioning of SYCTOM's centres and ensures the follow-up of operating contracts;
- The department for finance and general administration deals with the organisation and management of the Syndicate's resources;
- The department for technical services is responsible for SYCTOM's new centres, for the modernisation of equipment and for the management of the industrial heritage.

PROCESSING CENTRES

RESOURCES

766 persons are employed by the private companies which manage SYCTOM's processing centres.

SYCTOM requires that the operating companies respect the legislative and regulatory provisions which govern the work and that they favour permanent positions and, for certain positions, that they hire persons in difficulty in relation with the employment services of the municipalities. It then follows the answers provided to observations made by the health and safety committees (CHSCT).

In addition, in order to provide the sorting agents with

the best possible working conditions, SYCTOM invests to improve the ergonomics of the work stations and to optimise the air processing in the sorting cabins and their soundproofing. The modernisation of the installations and the automation of the sorting lines tend to facilitate the work of the operators and allow their role to develop towards quality control. The Syndicate also carries out a permanent awareness programme with its member local authorities, regarding the quality of sorting at source, in particular to prevent the agents from being exposed to health risks related to healthcare waste dealing with infectious risks.

SPECIFIC INDUSTRIAL EQUIPMENT

In 2008, SYCTOM had 14 treatment centres: 5 selective collection sorting centres, 3 waste reception centres, 1 transfer centre, 2 pre-sorting and transfer of bulky objects centres and 3 incineration units with energy recovery. It entrusted the operation to private companies within public contracts. The Syndicate maintains, modernises and develops its installations in accordance with a multi-year investment programme. It adds to its own capacities, which are currently insufficient to process all of the waste produced in its scope, having recourse to external equipment.

SYCTOM'S INSTALLATIONS

In 2008, SYCTOM had 14 processing centres distributed across 8 municipalities. It also mobilised 17 private installations.

In construction: 1 selective collection sorting centre in Paris in the XV arrondissement, 1 methanisation unit in Romainville and 1 river platform in Bobigny.

In the pipeline: 1 methanisation centre in Blanc-Mesnil/Aulnay-sous-Bois, 2 selective collection sorting centres in Paris and Paris XVII and 1 river transfer of bulky objects centre in Paris XIII.







PREVENTING AND RECOVERING WASTE

SYCTOM encourages reducing waste at source as well as sorting carried out by households. It also invests in new installations to recover recycled waste and process household waste or biodegradable waste, whilst producing alternative energy.

In 2004, it began a plan for preventing and recovering waste aiming to reduce buried or incinerated household waste by 300,000 tonnes per year by 2013.



SYCTOM informs the public on its mission and on the challenges related to waste management via publications, a website, exhibitions or open days.

It associates in its activity all the stakeholders of its installations - officials and municipalities, residents and associations.

Alongside annual sessions such as local information and monitoring committees which are held on the initiative of the prefect, it regularly brings together the committees for reviewing environmental quality guidelines, which ensure that the commitments it has taken with the officials and its operational staff in terms of environmental protection and lifestyle are respected and the consultative commission of local public services.

ON THE ENVIRONMENT

The Syndicate is attentive to reducing the pollution linked to its activities, in particular greenhouse gases. It sets up its installations near the waste production sites to limit road traffic. It builds them and operates them with respect to the population and the natural and urban environments by favouring innovative technical solutions. It also favours using alternatives to road transport.



Environmental quality guidelines: partnerships for the environment

In order to protect the natural, professional and urban environments, SYCTOM builds and operates its installations following environmental quality guidelines.

By signing them, the Syndicate, its project managers and operators are committed to a number of objectives in terms of resident populations and local authorities which are home to its equipment. Their commitments notably concern the preservation of resources, urban, architectural and landscape integration, limiting road traffic, minimising noise and odour pollution, information and cooperation of the public, professional integration and the quality of working conditions.

A joint programme for monitoring and control has been set up to ensure that the objectives are met.



2001-2008: RESPONSIBLE COMMITMENTS AND ACHIEVEMENTS

During the 2001-2008 mandate, SYCTOM carried out major projects whilst controlling its financial situation.

Modernisation and deployment of its heritage

In accordance with new regulations, SYCTOM has brought its smoke scrubbing up to standard in its incineration centres with energy recovery in Ivry-Paris XIII and Saint-Ouen and has created the multi-channel Isséane processing centre whilst transforming the former incineration plant and the household waste transfer centre at the end of the project. The Syndicate has also built 2 selective collection sorting centres in Nanterre and Sevran and has launched a project for a third centre in Paris XV, it has also begun renovation for the bulky objects sorting centre in Saint-Denis and scheduled construction for 2 sortingmethanisation centres in Romainville and Blanc-Mesnil/ Aulnay-sous-Bois.

Prevention and recovery

Since 2001, the total annual volume of waste processed by the Syndicate has fallen 10% (down 200,000 tonnes) and waste from the selective collection has doubled, increasing from 91,000 tonnes to 167,000 tonnes, reaching 7% of processed tonnage.

Development of alternative transport

At the end of 2008, SYCTOM's 3 HWIUs were equipped to allow the river transportation of clinkers. The newspapers and magazines from all of SYCTOM's sorting centres could be transported by water. 30% of bulky objects transferred in 2008 were done so by river.

Prospective management

The Syndicate's finances are healthy, thanks to a multiannual programme of budgets, active debt management, a 6% increase per year in fees and a good anticipation of charges, particularly those concerning the depreciation of Isséane.

PRIORITY GIVEN TO SUSTAINABLE MANAGEMENT OF WASTE

In May, the newly invested Syndicate committee confirmed the strategic guidelines that SYCTOM set itself in 2004:

- contributing to the prevention of waste to limit quantities to be processed;
- diversifying recovery methods and increase processing capacities. The development of the Syndicate's installations has to be done to the advantage of recycling and methanisation;
- reducing use of landfill as much as possible;
- developing methods of transport other than road by increasing the share of materials removed from the centres by railway or waterway to 90% by 2013.



DIRECTORY

Members of the Bureau in 2008.



14

* Replaced from 30 May 2009 by Marie-Chantal BACH, Paris Councillor.





2008 OVERVIEW

In 2008, SYCTOM firmly pursued its objective of increasing and diversifying its recovery ***capacities** whilst carrying out its daily activities to process the 2.4 million tonnes of waste received and to help change behaviours in order to be more environmentally-friendly.

The following are real proof of its constant investment efforts: opening of the Sevran sorting centre, beginning of works for the Paris XV sorting centre, progress in procedures for public contracts for 3 large-scale projects (modernisation of the bulky objects sorting centre in Saint-Denis and creation of multi-channel centres in Romainville/Bobigny and in Blanc-Mesnil/Aulnay-sous-Bois) as well as reaching key stages in deciding on the future of the lvry-Paris XIII recovery centre.

Whilst the production of household waste on SYCTOM's territory has fallen by an annual average of 0.7% since 2001, this trend has become more marked with the economic crisis. Although this is part of the policy for reduction at source, it is also the sign of a fall in household consumption in the Paris region: in 2008, the fall was 2% (down 2% for household waste, down 5% for bulky objects, down 30% for waste received in waste reception centres). It has exceeded 50,000 tonnes – household waste accounts for 84%, bulky objects 8% and waste reception centres 1%. However, selective collections have stabilised.

The gradual mobilisation of the multi-channel centre Isséane has been reflected in an 18% increase in the quantity of incinerated waste. This largely explains the 75% reduction in buried waste. The production of recyclable material, including incineration residue, has increased by 9% and use of river transport has grown by 13%.



* To avoid a double count, the energy recovery rate is calculated by subtracting from the total incineration tonnage the incineration residue (clinkers and metals) which is subject to materials recovery.

rapport d'activité 2008

PREVENTION

The best waste is that which is not produced. As collecting and processing waste has an impact on the environment and costs the municipality money, we must avoid generating the former. We can recycle more not only by sorting waste better, but also by consuming differently – going shopping with a bag, favouring reusable products and those with recyclable packaging, etc.

In order to change mentalities and behaviours, SYCTOM continued its campaign in 2008 to promote the reduction of waste at source: communication operations, supporting the construction of a network of waste reception centres, helping collect used clothes, and other actions. It also took part in discussions on a regional level on the prevention of waste and accompanies its member local authorities in the implementation of e-waste collections. In 2008, the sums it spent on the prevention of waste exceeded 60,000 euros.

INFORMATION

NEARLY 40% ADDITIONAL VISITORS

In 2008, 1,402 persons visited SYCTOM during the open days that it organised in its sorting centres in Nanterre and Sevran and in its incineration centres in Saint-Ouen and Ivry-Paris XIII. In addition, 3,874 persons learned about SYCTOM's installations during visits scheduled throughout the year – an increase of nearly 40% compared to the previous year. School groups accounted for half of visitors, jumping 64% compared to 2007. The sorting representatives, the municipal waste services technicians or even guardians of buildings – all precious sources of information – have also been received during appointments made with the member local authorities of the Syndicate or its local partners.

A special awareness session

Just like the open days, these meetings aim to allow visitors to learn about the functioning and organisation of a sorting or energy recovery centre – in Nanterre, Sevran and Ivry-Paris XIII. They allow everyone to gain increased awareness of the impact of the production of waste and the importance of sorting at source. Demonstrating in order to change behaviours is the objective of this transparency initiative. This is also what is behind the development of a tour for visitors and an information room in the more recent SYCTOM centres (Sevran, Isséane) or those to come (Paris XV, Romainville/ Bobigny, Blanc-Mesnil/Aulnay-sous-Bois).

SUBSIDIES UP TO 10,000 EUROS TO CHANGE BEHAVIOURS

SYCTOM has stepped up its prevention policy for 2008 and 2009 by deciding to financially support local campaigns aiming to promote the reduction of waste. It grants subsidies up to 10,000 euros per year, per municipality within project tenders.

Awareness campaigns

3.874

1,494

2.380

2008

2,418

1,622

2007

Its support concerns initiatives which aim to reduce the quantity and the noxiousness of waste thrown into the bin or to develop more responsible methods of consumption. The projects should be presented by the member local authorities, but they can also be registered by associations, consular chambers, public establishments, housing associations or teaching establishments.

Change in the number of visitors to SYCTOM'S installations since 2004

1,970

1.468

2006

Visits of groups of adults
 School visits

403

2004

1,425

748

2005

No. of visitors

3,000

2,000

Between 2004 and 2008, the number of visitors to SYCTOM's installations during scheduled visits during the year grew tenfold.



In 2008, the Syndicate committee voted for the dematerialisation of the assembly's documents (deliberations, decisions, laws) in order to reduce the amount of paper used.

Less waste in Paris

In 2008, the Syndicate thus granted a subsidy of 10,000 euros to the City of Paris to carry out a pilot operation in the 11th arrondissement. From 2009 to 2012, a programme of on-the-ground actions called "Less waste in Paris" will be tested with the aim of creating collective awareness and changing the behaviour of all waste producers residents, shopkeepers, companies, public services,, etc. This initiative should then be applied to all of the capital, to reduce its waste by 50,000 tonnes in 5 years, in accordance with the local plan for waste prevention adopted by the Council of Paris in 2007.



Per person, household waste processed by SYCTOM in 2008 is 10% greater than the national average: 467kg/year as against 425kg/year (source ADEME - IFEN 2006). Some factors which explain this phenomenon are the presence in household waste of waste from commercial services and companies, which are over-represented in Paris, the strong representation of households of one or two persons in the Paris region and a higher consumption than in the other regions. The production of waste per person has fallen 2% compared to 2007 (475kg) and 5% compared to 2001 (494kg).

* Quantities processed by SYCTOM on a like-on-like basis (76 municipalities and 5.07 million inhabitants in 2008).

FINANCING OF A 10TH WASTE RECEPTION CENTRE

SYCTOM has allocated a land subsidy of 25,700 euros to the community of the Arc-de-Seine agglomeration for the creation by SYELOM of an inter-municipal waste reception centre in Meudon. This is the 10th waste reception centre in 4 years that the Syndicate is helping to finance, after those in Aubervilliers, Bagneux, Gennevilliers, Paris 18, Paris La Chapelle, Pierrefitte, Sevran, Tremblay-en-France and Villepinte. It thus favours the implementation of a community network, which is essential to encourage eco-citizens. These subsidies totalled over €380,791.

A community network

The waste reception centres receive occasional waste from households; this waste cannot be included in selective collections nor in household waste, given its size, volume or toxicity: bulky objects, e-waste, construction debris, batteries, solvents, oil, etc. Their development or their modernisation is necessary to recover the waste and so that they can receive special waste such as healthcare waste or waste which cannot be processed by methanisation. Waste reception centres are also special places to make residents aware of prevention and the sense in sorting waste.



Present at various trade fairs including the Salon de la nouvelle ville, the Salon des collectivités, the Biennale de l'environnement in Seine-Saint-Denis and the Biennale des déchets de Paris, SYCTOM exchanges with a varied public made up of specialists and non-specialists alike.

HELPING REUSE AND RECYCLE USED CLOTHES

To favour the establishment of drop-off points for used clothing, SYCTOM has continued to support the association Le Relais and Écotextiles. It has exempted these two organisations from the tonnage fee for the non-recyclable part of textiles which they have collected in the municipalities. Le Relais collected 5,106 tonnes in 62 municipalities - an increase of 20% compared to 2007, and Ecotextiles collected 1,091 tonnes in 22 municipalities - an increase of 32%. Three-quarters of the clothing have been reused or recycled, representing some 4,750 fewer tonnes to be processed by SYCTOM. This support also favours the development of local micro-businesses based on social integration positions. It will be maintained until the end of 2009, which will give the channel linked to the application of the principle of the wider responsibility of the producer to be completely deployed.

SYCTOM has renewed its support to the Grand prix de l'environnement for the Paris region, which has been rewarding local authorities for sustainable development projects for 12 years.

CONTRIBUTION TO REGIONAL WORKING GROUPS

SYCTOM has been involved in working groups which have brought about the regional project for the disposal of household and associated waste (PREDMA), one section of which is dedicated to the prevention of waste. It highlighted the fact that prevention is an absolute priority and that quantitative objectives for the reduction of waste per person should be set.

Within the framework for the regional project for the disposal of healthcare waste (PREDAS), it was necessary to take into account the waste of this type of products by households in order to prevent the infectious risks that it presents for the health of sorting agents, as well as in the methanisation channel which is going to be implemented.

The Syndicate has also been solicited by the Regional observatory for waste in the Paris region (ORDIF) to create a guide on waste prevention, distributed to local authorities in the Paris region. It presented its actions in favour of preventing and reducing waste at source. Finally, on the request of ADEME (agency for the environment and energy management), SYCTOM took part in the steering committee set up to create an observatory for prevention in the Paris region.



TECHNICAL EXCHANGES

ON THE COLLECTION OF E-WASTE*

SYCTOM has carried out awareness campaigns on the collection of e-waste with its member local authorities, in liaison with the approved coordinator for e-waste (OCAD3E) and ADEME since 2007. In 2008, the Syndicate organised a technical information meeting to review the regulations relative to e-waste, to expose the clean-up processes implemented by the channel and to share local experiences. The occasion was used to remind those present that the collection of e-waste in a compression vehicle is not compatible with the eco-organisations' recovery criteria. Indeed, the objects cannot be cleaned up correctly when they are crushed or damaged.

Evaluation of solutions

To reduce the presence of e-waste in bulky objects, the Syndicate has put forward various solutions. It provides financial support to its members who create a waste reception centre or who modernise it to include an e-waste drop-off point. In addition, it decided to carry out another information campaign in 2009 to promote the "one for one" gesture. It also compares other methods of recovery with OCAD3E and ADEME to help its members choose the solution that is the most suited



In 2008, open days were organised in the processing centres in Saint-Ouen, Nanterre, Ivry-Paris XIII and Sevran. These meetings were a unique opportunity to make visitors aware of the challenges of prevention and sorting waste at source.

to their own situation. In particular, a study was launched to analyse the impact of depositing small electrical appliances in the yellow selective collection bins in Paris.

* Electrical and electronic waste





Household waste is a mine of resources: it contains materials which can be reintroduced into a production cycle. By recycling them, we can reduce waste and preserve natural resources, thereby saving raw materials, preventing the environmental impact of mineral extraction and saving water and energy in production processes. Recycling waste also creates new business.

The efficiency of recycling depends of the quality of sorting at source. Waste deposited in the wrong bins is removed from the materials recovery channel. Upstream, it depends on the performance and cost of mechanical sorting techniques as well as global recycled materials prices.

In 2008, SYCTOM continued to increase its sorting capacities with, for the selective collections, the start-up of the Sevran centre and the construction of the first Parisian sorting centre and, for bulky objects, the project selection for the modernisation of the Saint-Denis centre. The mobilisation of the Isséane sorting centre and the first full year of operation of the Ivry sorting centre after improvement works were also highlights.

Although tonnage of waste entering sorting centres and waste reception centres fell by 5%, materials recovery increased by 2%. Thanks to strong growth in bulky objects sorting (up 13%) and the increased efficiency in capturing materials from selective collections, it reached 219,000 tonnes. In total, waste which was subject to materials recovery (selective collections, bulky objects, waste reception centres, clinkers and other incineration residue) represents some 700,000 tonnes, i.e. 27% of the tonnage processed by the Syndicate.

MATERIALS RECOVERY OF SELECTIVE COLLECTIONS



Since 2008, the 10 municipalities of the north-east of Seine-Saint-Denis (Aulnay-sous-Bois, Le Blanc-Mesnil, Clichy-sous-Bois, Coubron, Le Raincy, Livry-Gargan, Sevran, Tremblay-en-France, Vaujours, Villepinte) and



SYCTOM invested 13.8 million euros in the selective collection sorting centre in Sevran.

their 350,000 residents have had a community sorting centre in Sevran. Started in November, it is set at the heart of a catchment area with a radius of 10km. Over the year it will receive 10,000 tonnes of waste from selective collections.

Respect for the environment

To reduce disturbance for residents, the neighbouring residential area has been separated from the building by a high slope planted with trees. The work stations were designed following the ergonomic recommendations of the national institute for research and security (INRS). Around thirty people are employed on this site. They were recruited predominantly from the local population, and six are on integration contracts.

KICK-OFF FOR THE FIRST PARISIAN SORTING CENTRE

The construction of the Paris XV selective collection centre began in October 2008. It is the first of the 3 sorting centres in Paris city centre provided by SYCTOM to meet the rise in the collection of yellow recycling bins in the capital and to rebalance the distribution of its installations between Paris and the suburbs. The cost of this equipment amounts to nearly 28 million euros for the Syndicate.

On Mesolithic remains

The Paris XV site was able to start after 6 months of archaeological excavations which uncovered traces of hunters-gatherers from 8000 years B.C. – the most ancient site of a Paris population ever identified. Construction will last 20 months. To be handed over in the second quarter of 2010, the unit will receive the sorted waste of 350,000 inhabitants from part of the 14th and 15th arrondissements, i.e. 15,000 tonnes/year or 20 skips per day.



Currently under construction, the Paris XV sorting centre will be situated on the edge of the ring road, to the north-west of the heliport. Of a high environmental quality, its architectural project stands out by its outstanding integration of the landscape and the city.

It will also receive the pneumatic household waste collection from this new district. The Paris XII centre is to replace the lvry-Paris XIII sorting centre.

2 planned centres

In a community spirit aiming to limit road traffic and reduce greenhouse gas emissions, SYCTOM is planning to build two other sorting centres in Paris. Paris XVII will take place within the redevelopment of the Batignolles district. It will process around 30,000 tonnes/year of waste from the selective collection from the Paris arrondissements and suburbs.



With a processing capacity of 20,000 tonnes/year and gradually mobilised in 2008, the Isséane sorting centre has recovered 73% of the 12,500 tonnes of selective collection which it has received, i.e. 9,095 tonnes.

SORTING CENTRE IN NANTERRE: WORKS SCHEDULED

In 2008, SYCTOM carried out a feasibility study with a view to modernising the Nanterre centre which dates back to 2004. The results of this study led SYCTOM to schedule works relative to optimising the security of the site and the working conditions of the agents. The Syndicate has also decided to continue its studies on the modernisation of the sorting process.

MATERIALS RECOVERY OF BULKY OBJECTS

BULKY OBJECTS CENTRE IN SAINT-DENIS: PROJECT SELECTION



After an architecture competition, SYCTOM has chosen the group of companies managed by the Inddigo agency as project manager for the modernisation of the pre-sorting and transfer of bulky objects centre in Saint-Denis. Completely overhauled, this unit will be able to pre-sort 60,000 tonnes of bulky objects per year. All exiting materials will be evacuated by river, thus preventing the circulation of 1,300 lorries per year. The current waste reception centre will be reconstructed by the community of the Plaine Commune agglomeration, with the financial support of the Syndicate.

Start-up end 2011

The architectural project was selected in close cooperation with the communes of Saint-Denis and Île-Saint-Denis, the community of the agglomeration of Plaine Commune and the autonomous port of Paris. This is in continuity with the banks of the Seine. The discharge and handling of waste will be carried out inside the building. The site should begin in September 2010 and operations should begin at the end of 2011. During the works, SYCTOM will call upon private centres to ensure the continuity of service. The cost of the project is estimated at over 16 million euros, excluding tax.



Once renovated, the bulky objects sorting centre in Saint-Denis will include a green façade on the Seine side and a curved façade reminiscent of a boat's hull on the road side.





High environmental quality

The industrial buildings with which SYCTOM is equipping itself are designed following high environmental quality criteria (HEQ).

The installations are studied to improve the working conditions of the operating agents, in terms of hygiene, quality of air and professional comfort (physical, thermal, visual, acoustic and olfactory).

In order to save natural resources, recyclable materials are favoured in the construction. They are also systematically integrated in energy management projects (controlling energy consumption, using renewable energies) and the control of water consumption (recovering and reusing rainwater, measures for saving drinking water).



In total, 27% of waste processed by SYCTOM results in materials recovery.

2008 ACTIVITY REPORT

Volume of waste which results in materials recovery received and processed per centre (selective collection, bulky objects, waste reception centres).

JP 41

Selective collections

After having been sorted by households and put in the relevant bin (usually the yellow bin), newspapers, magazines, cardboard packaging, plastic bottles, food cartons, metal food tins, aerosols and cans are sorted again by SYCTOM.

At the entrance to the sorting centres, a visual quality control is carried out. If the content of the skips contains too much undesirable waste (household waste, soiled materials,, etc.), it is not sorted but sent to an energy recovery or landfill centre. This represents 7% of the quantities collected (12,000 tonnes in 2008). Furthermore, the municipality will apply the tariff for the cost of processing household waste, which is much less favourable than that for selective collections.

The waste arriving in the centres is sorted mechanically and manually. That which is recyclable - 70% - is separated per material (cardboard, paper, types of plastic, steel, aluminium, etc.) and compacted in the form of "balls" before being transported to the industrials (paper or steel workers, etc.). The remaining 30% is sent to an energy recovery or landfill centre. This is waste which has been mistakenly been placed in the collection bin (plastic bags and film, blisters, plastic containers, etc.) or which does not correspond to industrials' recovery criteria (soiled paper for example) or which has been rejected by the sorting line (objects which are too small or interlocked, etc.).

Bulky objects

Bulky objects (broken or used furniture, mattresses, electrical appliances, large cardboard boxes, etc.) and construction debris is pre-sorted in SYCTOM centres before being transported to specialised centres. After this second sorting, only 45% is then sent to dedicated recycling channels. The presence of e-waste which does not correspond to the recovery criteria of the channels partly explains the high rate of rejects. The remaining 55% is essentially sent to the landfill centres.

Incineration residue is also recycled. Metals are delivered to the metal industry for the production of new alloys. Clinkers are used, after processing, as ballast by the civil works sector.

2008 OVERVIEW



A second life for recyclable materials



ENERGY AND ORGANIC RECOVERY

The European Union has set itself the 2020 objective of reducing its greenhouse gas emissions by 20% compared to 1990 and of increasing the share of renewable energy sources in the consumption of final energy by 20%. This objective was set at 23% by the Grenelle 1 law.

As residual household waste is made up of around 60% biomass, it forms an interesting alternative source of energy to fight against climate change. When incinerated, it can be substituted for fossil fuels to fuel electric networks or urban heating. In this way, 10% of household electric consumption or 15% of households' needs in terms of heating and hot water could be covered by the incineration of their waste.

Using up little surface area, the combustion of waste is a particularly attractive option in towns and cities. It also has the advantage of significantly reducing its quantity: residual waste accounts for only 2% of tonnage entering the SYCTOM energy recovery units, and clinkers, which account for 21%, are recovered.

Another procedure for recycling bio-waste: methanisation, which is used to make compost and produce energy. The 3 main recovery projects that the Syndicate plans on carrying out in the next 10 years integrate this innovative procedure. They have made significant progress during the year.

In 2008, SYCTOM processed 57.5% of the waste it received in the energy recovery units (1,697,783 tonnes). During its first year of use, the Isséane multi-channel centre helped avoid landfill of over 371,000 tonnes of waste. With its gradual start-up, the Syndicate's capacities for producing steam increased by 14%, which allowed 300,000 homes to be heated⁽¹⁾ in total.

MOBILISATION OF ISSÉANE

With start-up at end 2007, the multi-channel centre Isséane integrates a selective collection sorting centre and an energy recovery by incineration unit (the bulky objects sorting activity was stopped during 2008). It is positioned to process waste from over one million inhabitants of the west of Paris (22 municipalities in Hauts-de-Seine and the Yvelines and 3 arrondissements of Paris). The incineration of 460,000 tonnes/year of non-recyclable waste will provide heating and hot water to 79,000 homes⁽¹⁾ and will produce electricity going beyond its own needs on the site.

Gradual start-up

The year was characterised by the running in of the equipment and the gradual start up of the processing capacities. The local authorities of the catchment area therefore had to considerably adapt to distribute their flows depending on the processing possibilities. In total in 2008, the start-up of Isséane meant that over 371,000 tonnes of waste did not have to be stored and provided the heating and hot water for some 39,000 homes⁽¹⁾.



Made up of 19 monitors, residents or employees from resident companies, the group of permanent observers formed at the beginning of the Isséane project continued its mission to follow the functioning of the site.

Assessment for bulky objects

The bulky objects sorting process was stopped, as the rate of dust accumulation exceeded the acceptable threshold for the health of the operating staff. Assessment was entrusted to an independent consultancy with a view to examining the solutions which could be implemented. One of them consists in concentrating on sorting waste from selective collections, by developing and optimising the areas and capacities which it is allocated.

PROGRESS IN METHANISATION PROJECTS IN SEINE-SAINT-DENIS

Two modern waste recovery centres should be implemented in Seine-Saint-Denis. They will process 400,000 tonnes of waste, of which 40% is currently buried and 60% incinerated. Both including sorting processes and methanisers, they will transform the waste into recycled materials, bio-energy and compost.



The environmental quality guidelines which determine the commitments to be respected by the multi-channel centre in Romainville and the river platform in Bobigny were signed with the towns of Romainville and Bobigny in 2008.

Romainville/Bobigny

In 2008, SYCTOM allocated a contract for the design, production and operation of the multi-channel processing centre in Romainville and a river platform to the Urbaser/Valorga/S'pace group for a total of 410 million euros (of which an investment of 192 million euros excluding tax). In June 2008, the group took charge of the management of the current site, conserving the teams on site. It should create a sorting-methanisation unit for residual household waste (315,000 tonnes/ year), a selective collection sorting unit (30,000 tonnes/ year) and a pre-sorting unit for bulky objects (60,000 tonnes/year). It should also build a river platform on the Ourcq canal in Bobigny - to evacuate exiting material by waterway - and build a tunnel under the RN3 road to link it with the processing site. 18,000 lorries/year will therefore be avoided. The start of works is scheduled for the beginning of 2010, with start-up in the first half of 2013.

Blanc-Mesnil/Aulnay-sous-Bois

The procedure for a government contract for the design and creation of the centre in Blanc-Mesnil/Aulnay-sous-Bois was launched in June 2008. Built as co-developer with the SIIAP, this innovative installation will be unique in that it methanises both biodegradable waste (40,000 t) and silt from the future neighbouring waste water treatment plant (10,000 tonnes).

* Results obtained during the last 5 characterisation campaigns carried out in 2007 and 2008 using samples of 38 bins of household waste.

In total, 71% of waste processed by SYCTOM is incinerated.

The steam produced by the incineration of the waste is sold to the CPCU (Paris urban heating company). Sent by underground pipes to buildings served by the CPCU, it is transformed into hot water to feed radiators and to heat water. SYCTOM's total capacity enables 300,000 homes to be heated⁽¹⁾, which prevents use of 6,000 collective heaters and the consumption of 300,000 toe.

The sale of steam and electricity amounted to 34.3 million euros in 2008.

Monitoring atmospheric waste

Atmospheric emissions in the SYCTOM energy recovery by incineration centres are continuously controlled and analysed using measurement instruments placed in the chimneys. The reports are communicated regularly, each month or each quarter depending on operation orders, to the technical inspection department of the installations classified by the police headquarters. They can also carry out spot checks.

Furthermore, the Syndicate calls upon independent laboratories which carry out random checks twice per year (in addition to two regulatory checks) for the duration of operation. In 2008, these measuring campaigns show that emissions are well below the regulatory thresholds (see table of results for controlling waste, page 43).

All of this data is transmitted to the receiving municipalities and residents of the centres, to the local commission

for information and monitoring (CLIS) and to the committee for monitoring the environmental quality guidelines. It is also available in the public information file provided each year to the prefecture and can be consulted on SYCTOM's website.

Environmental impact

The impact on the environment of the atmospheric emissions of dioxins and furans and elements with metallic traces is also the subject of a monitoring programme. Owen-type gauges are installed on key points to measure the degree of pollution linked to the presence of incineration units. These points have been determined by mathematic models. The gauges are exposed for 2 months.

Bio-monitoring

In parallel to this regulatory monitoring, SYCTOM carries out one-off bio-monitoring campaigns to improve

the knowledge of the sanitary and environmental impact of its installations. It has entrusted the companies ASCAL, ESOPE and ARIA with the task of measuring the content of plant pollutants in the environment of its sites. In this way, in 2007 and 2008, two cabbages were exposed near the gauges relative to the Saint-Ouen and lvry centres, following the recommendations of the guide by INERIS⁽²⁾. This allowed them to establish a correlation between the degree of surrounding pollution and the maximum food values, or to compare the monitoring methods gauges and bio-monitoring. Furthermore, for Isséane, a zero point was carried out using bio-indicators (moss and lichen) as well as an additional campaign in the year following the start-up of the centre. No specific impact has been brought to light on these 3 sites through the different campaigns.

(1) Standard 80m² home occupied by 4 persons in a collective building built between 1995 and 2000.

(2) National institute for industrial environment and risks - Guide entitled "Method of monitoring for dioxin and furan fallout around a household waste incineration unit".

IVRY-PARIS XIII: KEY STAGES OF COOPERATION

2008 was characterised by an important step in the cooperation initiative that SYCTOM began 6 years ago on the future of the multi-channel centre in lvry-Paris XIII, in close cooperation with the towns of lvry-sur-Seine and Paris. Built in 1969, this unit sorts and recovers 730,000 tonnes of household waste per year and heats 100,000 homes⁽¹⁾. The debates on the renewal of the site carried out with the local authorities and populations concerned have demonstrated the interest in the reduction of its processing capacities and in the implementation of exemplary solutions in environmental terms.

Extension works

SYCTOM is planning a 3-year works programme (73 million euros excluding tax) in order for the cooperation process to continue to run smoothly and in order to ensure the continuity of service, which will extend the life of the centre to 2018 in the best conditions of efficiency and security, at a controlled cost. It has also carried out studies so that its operation may be continued to the maximum of its capacities during the construction phase of the future centre.

Feasibility of the project

The feasibility studies begun in 2007 for the creation of an energy recovery centre combining methanisation and incineration processes have been finalised: the 3 multi-disciplinary teams selected put forward their proposals at the end of 2008. All conclude in the viability on the site of this mixed solution which will reduce the waste incinerated by 350,000 tonnes/year, that is to say by half, whilst maintaining the production of heat at its current level. Intended to receive 600,000 tonnes of waste (residual household waste and residue from the methanisation units in Seine-Saint-Denis), the site should include a sorting platform for household waste before methanisation.

Public debate

In December, the Syndicate committee authorised the Chairman of SYCTOM to refer the matter to the National public hearings committee (CNDP) in accordance with the law of 28 February 2002 relative to local democracy. The latter decided in 2009 that the project for the centre for biological and energy recovery of waste in lvry-Paris XIII should be subject to a public hearing, which it will organise. At the end of this procedure and given the instruction of the debate, SYCTOM shall then be in a position to decide on the content of the project in 2010.

SYCTOM's waste: a source of alternative energy

1,371,472 tonnes of household waste incinerated

- ➡ heating and hot water for 300,000 homes⁽¹⁾
- consumption of 300,000 tonnes equivalent of oil prevented
- coverage of 50% of the needs of the CPCU's network)

The mobilisation of the Isseane incineration centre which opened end 2007 is the cause of the 17.5% increase in the quantity of incinerated waste (up 304,778 tonnes). Its functioning at full capacity will allow SYCTOM to recover energy from a total of 1,900,000 tonnes of waste per year – a threshold 4% lower than the average tonnage processed from 2001 to 2004. LANDFILL

SYCTOM uses landfill as a last resort: for waste which it cannot process due to insufficient energy recovery capacities (i.e. 17% of residual household waste or 337,380 tonnes) and for residual waste, i.e. that for which there are currently no viable recovery solutions in technical, economic or environmental terms. Belonging to this category are smoke scrubbing residues from incineration and waste whose recyclable material has already been extracted (rejects from selective collections and bulky objects). The diversification of its processing methods and the increase in its capacities for recovery as well as its actions in favour of the prevention of waste are aimed at reducing the quantities of waste buried as much as possible.

Exercising its public service mission in a very dense urban zone, the Syndicate does not have any landfill installations for dangerous or non-dangerous waste (ISDD or ISDND, formerly CET). It uses private sites outside its scope of intervention and which, certified in accordance with ISO 14001 standards, present guarantees in terms of controlling environmental risks.

In 2008, SYCTOM sent 19% of the waste (household waste, declassifications and rejects) to ISDND installations (473,327 tonnes).

for non-dangerous waste. These installations meet strict regulations in terms of the waterproofing of the sub-soil, the recovery of biogas and leachates, the drainage of rainwater and the monitoring of the quality of the groundwater level.

Ash and smoke-scrubbing residues from household waste incineration plants (REFIOM) concentrate the pollutants contained in the waste or generated during combustion. They are processed to make them inert before being buried in a site for dangerous waste. They are stocked in waterproof cells which are filed to ensure their traceability.

Furthermore, 38,815 tonnes of construction debris was deposited in class 3 CETs, reserved for inert waste.

The buried tonnage in the landfill installations for non-dangerous waste fell by 75% in 2008 (down 357,223 tonnes). This fall is 85% due to the start-up of Isséane which has incinerated over 370,000 tonnes of household waste. The functioning at full capacity of its incineration unit will allow a further reduction of 90,000 tonnes of residual waste and enable it to descend beyond its 2005 landfill level. Overall, 20% of waste processed by SYCTOM is deposited in ISDD and ISDND installations.

2008 OVERVIEW

The rebalancing of methods of transport forms part of the guidelines of the European transport policy and the Grenelle law to limit nuisances related to road traffic: greenhouse gases, atmosphe-

Since 1995, SYCTOM has made developing alternatives to road transport one of its strategic priorities in order to contribute to the fight against climate change. It has set itself the objective of transporting by railway or waterway 90% of its outflows by 2013, which will prevent the circulation of 40,000 lorries per year. To install its equipment, it takes into account the possibility of using soft methods. The project developed with UPM Chapelle-Darblay to transport newspapers and magazines is exemplary in this respect. For these flows, the usage rate of waterways reached 80% in the second half of 2008.

Over the year, recyclable waste or material transported by barge has increased by 15%, increasing from 220,377 tonnes to 252,636 tonnes. With 24% of tonnage evacuated by alternative methods of transport, there are 11,000 fewer lorries on the roads.

FROM RAILWAYS TO WATERWAYS

Since May 2008, clinkers from the energy recovery unit in Saint-Ouen (120,000 tonnes/year) are transported by barge to the specialised processing centres in Saint-Ouen l'Aumône (95) and Triel-sur-Seine (78), located around fifty kilometres away. Twenty-two lorries per day are thus avoided. Waterways also have greater availability than railways until now.

ALTERNATIVE TRANSPORT

ric and sound pollution, congestion, accident risks.

A new type of mobile crate (intermodal transport unit or ITU) is used in a loop to transport the bundles of recyclable paper and the reels of new paper. The ITUs use the Seine between the port of Gennevilliers and the port of Rouen. They are loaded onto lorries for short-distance deliveries between these two ports and SYCTOM's installations, from Chapelle-Darblay and the printers.

EXTENSION OF RIVER TRANSPORT FOR NEWSPAPERS AND MAGAZINES

Initiated in 2005, from sorting centres in Nanterre and Gennevilliers, river transport of bundles of newspapers and magazines (NM) to the Chapelle-Darblay site near Rouen was extended to all of SYCTOM's sorting centres in September 2008. A subsidiary of the Finnish group UPM Kymmene, the factory produces 350,000 tonnes of newspaper per year, solely from recycled fibres. From 17,000 tonnes in 2007, its supply via waterways by the Syndicate increased to some 38,000 tonnes in 2008. A weekly logistics loop has been implemented to this end by the paper factory, its clients and SYCTOM, with the barges delivering the recycled newspaper to printers in the Paris region. In the second half of 2008, the usage rate of waterways for newspapers and magazines reached 80%. In a full year, this would mean 1,650 fewer lorries on the roads.

By requesting its industrial partners to use alternative methods of transport, SYCTOM gives impetus for sustainable development projects.

In 2008, the 15% increase of tonnage evacuated by water can be explained essentially by the growth in the transfer of bulky objects (up 15,000 tonnes) and the deployment of container logistics for newspapers and magazines (up 21,000 tonnes). The reduction in alternative transport for clinkers is linked to the start of new contracts which required a period of preparation for their beneficiaries and to the difficulties in starting the river link to Isséane. Compared to 2001, alternative transport of waste has increased by 38%.

TECHNICAL AND FINANCIAL REPORT

2008 continued the trend of the previous years, with a controlled financial situation.

Starting the year on a healthy basis, SYCTOM was able to prepare a responsible budget in order to anticipate the future and approach it calmly. It began to constitute a provision of 16.5 million euros in 2008 to confront any additional costs related to the works for the extension of the operation of the incineration unit in Ivry-Paris XIII and to ensure continuity of service. It paid great attention to the change in its debt and its interest charges, in order to preserve its investment capacities. With 60% of its loans at fixed rates, it has little exposure to the volatility of the financial markets. It has continued its investment programme, up to some 177 million euros, and continued to support selective collection, for an amount exceeding 20 million euros.

The Syndicate has also continued to ***control** its operating costs. Putting an end to the period of temporary management, the start of the multi-channel centre Isséane has brought about an optimisation of processing costs, as external centres are used to a lesser extent, and due to increased income related to the sale of steam to CPCU (3.7 million euros). The continuous adaptation and modernisation of its equipment, the negotiations carried out when renewing its operating contracts and its performance objectives contractually assigned to its operators have also allowed it to limit costs.

With a net operating profit of 6.9 million euros in 2008, SYCTOM has confirmed its ability to ensure the financing of its operations.

ACTIVITY REPORT 2008

FEES: + 6% IN ACCORDANCE TO COMMITMENTS

Income from fees in 2008 amounts to 257.63 million euros compared to 247.31 in 2007. Each municipality pays the fees depending on the number of inhabitants and the number of tonnes of waste processed by SYCTOM. Given the overall reduction in tonnage (down 2%), municipal and inter-municipal contributions increased by 4.17% in 2008.

The majority of income from fees, which covers 86% of the Syndicate's operating income excluding exceptional elements, is stable (at 85% in 2007). The increase in the fees (per capita and per tonne) remained contained in 2008, up 6% (annual increase since 2001), that is 90.07 euros per tonne processed (against 84.97 euros in 2007) and 7.07 euros per person (against 6.56 euros in 2007).

Totalling 49.3 million euros (against 41.6 in 2007), income from the sale of products (15 million euros of material recovery, up 3.7 million euros from the sale of steam at Isséane and up 30.6 million euros from the sale of steam and electricity in Saint-Ouen and Ivry-Paris XIII) has seen a sharp rise, thanks to two factors. With the beginning of operations in Isséane, the sale of steam to CPCU has generated an increase in income of 3.7 million euros. This shall be completed by the sale of electricity in 2009. The historic rise in global raw materials prices in the first quarter of 2008 explains the 13%

rise in income related to materials recovery (up 2 million euros). However, this growth is related to the economy and is not durable, with a fall in prices in the second half of 2008. In total, in 2008, energy and recycled materials sales accounted for 69.5% and 30.5 of product sales respectively.

GRANTS FROM ECO-ORGANISATIONS: + 6%

Grants from Eco-Emballages accounted for 15.2 million euros in 2008 compared to 17.1 in 2007. A reduction which amounts in reality to 651,000 euros, as the sums received in 2007 from Eco-Emballages contained matching surpluses. This 4% reduction can be explained in particular by the fall in the valuation rate and by the reduction applied by Eco-Emballages on EMR packaging for non-conformity with minimum technical specifications. This fall is, however, compensated by the grant paid for the first time by Eco-folio – an eco-organisation which supports the recovery of newspapers and magazines – in the sum of 2.8 million euros. Note that this amount corresponds to subsidies of two years of business, 2006 and 2007.

OPERATING CHARGES: ANTICIPATION

Operating expenditure amounted to 323.33 million euros, compared to 290.75 million euros in 2007. This growth is artificial as it is essentially due to exceptional charges which correspond to the formalities for the end of the Isséane site, in the sum of 27.4 million euros, which were counterbalanced by exceptional income of the same amount.

$\label{eq:operating_income_ineuros} \textbf{Operating income in euros} \ \textbf{incl. of tax}$

Administrative account	2007	2008
Contributions from member local authorities	247,311,327	257,627,604
Allocations, grants (including Eco-Embal- lages and Eco-Folio) and contributions	17,060,711	18,002,622
Other products from running management (including marketing of products)	17,054,171	24,429,618
Releases of provisions	-	-
Exceptional products	1,306,653	29,953,768
Results N-1	8,265,375	247,854
Total operating income	290,998,237	330,261,465

Investment pregramme per site in million ourse evel tax

investment programme per site in million euros excl. tax					
Site	Type of programme	Operating period	Work financed in 2007	Work financed in 2008	Total investment
Isséane	Processing centre (including land)	1998-2009	77.46	71.54	600.99
Saint-Ouen	Smoke scrubbing	2001-2008	0.17	0.33	39.90
Ivry-Paris XIII	Smoke scrubbing	2003-2009	2.95	2.82	46.91
lssy1	Temporary transfer centre	2005-2008	0	0.003	5.52
Saint-Ouen	Bringing up to standard and ongoing improvements	2008	0.51	0.95	0.95
Ivry-Paris XIII	Bringing up to standard and ongoing improvements	2008	0.37	0.60	0.60
Ivry-Paris XIII	Work to prolong the life of the factory	2008-2013	0	1	72.86
Nanterre	Sorting centre	1999-2009	0	0.02	20.21
Sevran	Sorting centre	2003-2008	4.93	5	15.50
Paris XV	Sorting centre	2004-2010	0.39	2.29	27.90
Nanterre	Bringing up to standard and ongoing improvements	2008	0.11	0.20	0.20
Romainville	Sorting centre	2008	0.30	0.82	0.82
Romainville / Bobigny	Sorting centre/methanisation	2005-2013	1.24	9.11	176.00
Blanc-Mesnil / Aulnay-sous-Bois	Centre for methanisation of waste and silt	2006-2012	0.14	4.35	117.72
Saint-Denis	Transfer centre	2007-2012	0.04	0.06	18.99
Ivry II-Paris XIII	Multi-channel centre	2007-2022	0.37	2.10	
Total			89.35	101.193	1137.26

Investment income in euros incl. of tax

Administrative account	2007	2008
Loans, including debt management	99,963,270	126,946,943
Subsidies	4,371,051	4,745,294
FCVAT	29,116,926	20,267,972
Depreciation of assets + costs to be spread	17,510,391	18,440,031
Provision	-	-
Other accounting adjustment entries	3,352,916	1,034,991
Reserves and results N-1	19,513,452	13,227,416
Total investment income	173,828,006	184,662,647

TECHNICAL AND FINANCIAL REPORT

If we do not take into account exceptional costs, the operating costs grew by only 1.3% (up 5 million euros). They correspond mainly to processing costs, which are now significantly reduced due to the end of the transitory management of Isséane and the permanent optimisation. Finally, a provision of 16.5 million euros was constituted to cover any additional costs related to the works for the extension of the operation of the incineration unit in Ivry-Paris XIII with a view to building a new waste processing unit.

FINANCIAL CHARGES:

As the result of an increase in outstanding debt due to financing the construction of the multi-channel centre Isséane (600 million euros excl. tax), interest costs have increased from 19 to 24.7 million euros. They represent 8% of current operating expenditure. The financial markets underwent contrasting developments in 2008 due to the subprime credit crisis, the interbank liquidity market crisis and the economic recession. Faced with an uncertain market and in a context of falling interest rates, SYCTOM has contracted loans at fixed rates. On 31 December 2008, the average rate of its debt was 3.92% and the amount of debt totalled 667.4 million (down 11%). At the same time, SYCTOM continued to regularly mobilise its short-term cash fund of 70 million euros, which generated financial costs of 243,620 euros, down 11,623 euros.

HUMAN RESOURCES COSTS: STABILITY

Human resources costs have fallen slightly from 6.2 million euros in 2007 to 6.1 million euros in 2008. This slight fall is due to vacant posts observed for part of the year. With 115 agents, staff numbers have remained stable and payroll still represents 2% of operating expenditure.

SUPPORT TO SELECTIVE COLLECTIONS

In 2008, SYCTOM continued its financial efforts (125.89 euros per incoming tonne) in favour of support to selective collections. The supported provided by SYCTOM to member local authorities for the development of selective collections represented 20.54 million euros in expenditure in 2008, down 1% compared to 2007, due to the slight fall in tonnage in selective collection.

CONTINUATION OF THE INVESTMENT PROGRAMME

The investment budget concerns 69% of equipment operations. It amounts to 176.6 million euros, an increase of 10%. The Isséane centre represents half of this (85.6 million euros in 2008). Amongst the main investments are expenditure relative to the sorting and methanisation unit in Romainville (10.9 million euros), the Sevran sorting centre (6.1 million euros), the Paris XV sorting centre (2.7 million euros), the methanisation unit in Blanc-Mesnil/Aulnay-sous-Bois (4.4 million euros), the smoke-scrubbing work on the incinerators in Saint-Ouen and Ivry-Paris XIII (3.7 million euros) and the studies for the transformation of the lvry-Paris XIII centre (2.5 million euros). The financial operations which represent 14% of the investment budget amount to 52.4 million euros, i.e. 24.5 million euros of capital reimbursement and 27.91 million euros in debt management operations.

Excluding debt management, investments are 63% covered by the loan (99 million euros were subscribed in 2008), 21% by own resources, 13% by the VAT compensation fund and 3% by subsidies and contributions.

Cost of processing selective collections (excluding transfer of glass and including processing rejects) in current€

The net cost of processing selective collections stabilised in 2008 at \in 201.39 per tonne (as against \in 201.83 in 2007), the slight growth in costs having been compensated by the increase in income with the new Eco-Folio grant. The operating costs, i.e. the cost of processing, excluding any financial contributions to encourage selective collections, amounting to 125.89 euros, paid by SYCTOM to its member local authorities, also remained stable in 2008 at 74.46 euros in 2007.

Cost of processing for incineration with energy recovery in current €

The fall in the cost per tonne of incineration can be explained by the end of the transitory management of Issy1/Isséane, a period during which SYCTOM had to use private HWIUs which are more costly than Ivry-Paris XIII and Saint-Ouen and by the disappearance of the Issy 1 transfer centre. It is also related to the increase in income from the sale of steam and electricity with the mobilisation of Isséane. This cost should, however, be put into perspective as only a part of the depreciation of Isséane was integrated in 2008.

In terms of bulky objects, the processing cost was stable in 2008. It amounts to 102.81 euros incl. tax per tonne as against 102.32 euros/ tonne in 2007.

Landfill costs are down on 2008, to 91.46 euros incl. tax per tonne, as against 101.72 euros incl. tax in 2007. With the closing of the transfer centre in Issy, the transfer and transport costs fell, with greater tonnage arriving directly to the waste landfill installations.

DETAILED OPERATING BALANCE SHEET

DATA ON MATERIALS RECOVERY

Selective collections in tonnes*

Centre	Tonnage received	Recovered tonnage	Operator
Ivry-Paris XIII	37,507	24,566	SITA
Romainville	32,695	22,512	Urbaser environnement
Nanterre	32,268	22,675	Veolia Propreté
Isséane ⁽¹⁾	12,484	9,095	SITA
Sevran ⁽²⁾	3,154	2,054	Veolia Propreté
Gennevilliers	13,497	10,538	SITA
Buc	7,387	4,919	Nicollin
lvry /Blanc Mesnil	20,039	14,358	Paprec
Chelles	7,872	6,291	Generis
Total	166,903	117,008	

(1) The Isséane sorting centre was gradually mobilised throughout 2008 which explains why the tonnage of selective collection received (12,484 tonnes) was lower than the nominal capacity of the centre (20,000 tonnes).

(2) The Sevran selective collection sorting centre was only opened in November 2008. Over the 2 months of mobilising the installation, 3,154 tonnes were received from 4 municipalities, compared to the 10,000 expected in a full year from the catchment area of 10 municipalities.

* The average rate of recovery is 70%.

Material	Recycled tonnage	Channel	Futur	Transport		
NM	67,357	Paper works UPM-Chapelle Darblay in Grand-Couronne (76)	Newspaper	River (barge or containers)		
EMR (brown cardboard + thin cardboard packaging)	31,046	Papeteries de la Seine (Smurfit) in Nanterre (92)	Brown cardboard	River project not yet operational		
Paper mix	5,462	Papeteries Emin Leydier in Nogent-sur-Seine (10). Various paper works in Europe	Brown cardboard	Barge from SITA Gennevilliers Lorries		
Packaging for food liquids (ELA)	1,131	Papeterie Georgia Pacific (27)	Toilet paper and kitchen roll	Lorries		
Plastic PET bottles	0 707	0 707	0 707	Various factories in France	Padding granules or fibres for textiles. Eventually, the granules make up bottles	Camion actuellement puis péniche vers Limay (78)
Plastic PEHD bottles	0,101	Various factories in France	PEHD products (cleaning pipes, watering cans, etc.)	Currently lorry then barge to Limay (78)		
Aluminium from selective collection	162	Recovco-Affimet Factory in Compiègne (60)	Spare car parts (principally)	Lorries		
Aluminium from clinkers	2,321	Taken by Corepa to Bruyères s/Oise (95) then sent to the Refinal factory (59)	Car spare parts	Lorries		
Steel from selective collection	2,523	Taken by TIRFER to Bonneuil s/Marne (94) then sent to a steel factory in the North	Steel products	Lorries		
Steel from clinkers	36,079	of France				

Bulky objects in tonnes

Centre	Bulky of	Operator	
	Tonnage received	Recovered tonnage	
Romainville*	mainville* 65,182 4,018		Urbaser Environnement
Saint-Denis*	30,785	37	Veolia Propreté
lsséane	449	172	SITA
Arcueil	14,564	1,563	SITA
Gennevilliers	30,135	17,080	SITA
Gennevilliers	266	96	REP
Buc	10,581	3,227	Nicollin
Claye Souilly*	4,663	27,816	REP
lvry	35,006	2,582	CFF
Chatillon	389	-	Veolia Propreté
Villeneuve le Roi	416	13	Veolia Propreté
Bonneuil/Marne		15,142	
Total	192,436	86,894	

* In a community logic, the municipalities dump their bulky object collections in SYCTOM's pre-sorting and transfer centres. The latter carry out very little recovery on-site. Almost all of the tonnage is transferred to private sorting centres to be more carefully sorted for materials recovery. Inversely, the private centres receive very few collections directly, but they recover a large amount of tonnage.

Waste reception centres in tonnes

Centre	Waste collect	Operator	
	Tonnage received	Recovered tonnage	
lvry-Paris XIII	5,413	4,585	SITA
Romainville	19,726	7,584	Urbaser Environnement
Saint-Denis	4,343	3,114	Veolia Propreté
Total	29,482	15,282	

DATA ON ENERGY RECOVERY AND LANDFILL

	T	Recovery							
Centre process	processed	Steam sold (MWh)	Electricity sold (MWh)	Clinkers (tonnes)	Ferrous (tonnes)	Non-ferrous (tonnes)	Operator		
Ivry-Paris XIII	669,030	962,346	55,092	130,278	16,064	580	TIRU		
Isséane	371,067	332,665	11,766	57,143	4,412	142	TIRU		
Saint-Ouen	607,504	1,246,569	8,815	123,652	15,132	1,544	TIRU		
Argenteuil	44,653	-	17,715	11,187	471	54	Novergie		
Saint-Thibault- des-Vignes	29,470	-	10,227	6,402	-	-	Novergie		
Total	1,721,724	2,541,579	103,615	328,662	36,079	2,321			

Control of atmospheric emissions in the incineration centres with energy recovery of SYCTOM of the Paris agglomeration.

Values of campaigns carried out in 2008 by laboratories NORISKO, VERITAS and SOCOR.

Type of waste	Maximum emission values applicable since 28/12/2005	lvry-Paris XIII			Saint-Ouen			Isséane					
	Ministerial order of 20/09/2002	Jan.	June	July	Nov.	Jan.	Apr.	Sept.	Oct.	Apr.	May	Aug.	Nov.
Concentrations in mg/Nm	³ at 11% of 0 ₂												
Particles	10	4.1	7.7	2.3	7.5	3.1	1.5	1.8	0.7	0.3	0.3	1.5	0.2
Hydrochloric acid	10	1.8	0.7	4.4	1.6	2.3	1.4	6.2	1,2	7.3	2.8	4.1	3.5
Hydrofluoric acid	1	0.2	0.1	0.5	0.1	0.1	0.1	0.6	0.02	0.1	0.1	0.6	0.3
Sulphur dioxide	50	15	20	23	27	13	16	22	7	4	4	2	3
Nitrogen oxide	80(1)	62	65	52	85 ⁽²⁾	53	50	51	46	27 ⁽³⁾	11	32	43
Cadmium+thallium	0.05	0.013	0.012	0.005	0.011	0.010	0.002	0.013	0.004	0.001	0.011	0.009	0.009
Mercury	0.05	0.019	0.001	0.003	0.002	0.026	0.007	0.017	0.003	0.007	0.001	0.006	0.018
Antimony + arsenic + lead + chromium + cobalt + copper + manganese + nickel + vanadium	0.50	0.22	0.36	0.11	0.25	0.26	0.06	0.26	0.04	0.14	0.07	0.06	0.06
Dioxins and furans (in ng/Nm ³) ⁽⁴⁾	0.10	0.025	0.022	0.018	0.014	0,003	0.020	0.005	0.015	0.004	0.003	0.009	0.015

(1) The Paris region plan for the protection of the atmosphere has set the maximum emission value at 80 mg/Nm³ (the threshold set by the European directive is 200 mg/Nm³), repeated in the authorisation order to operate in Ivry-Paris XIII and Saint-Ouen.

(2) The value obtained, between the daily (80 mg/m³) and semi-hourly (160 mg/m³) regulatory thresholds, should be put into perspective as the random waste check carried out by the laboratory for this parameter does not cover 24 hours but a slot of a few hours. Continuous measures carried out by the operator under its self-check for the same period, integrated over 24 hours and 30 minutes, remain lower than the applicable regulatory thresholds.

(3) At Isséane, the operating order delivered by the Prefect of the Hauts-de-Seine sets the threshold for emission of nitrogen oxides at 70 mg/Nm³, in force in the Paris region. (4) Ng/Nm³ = nanogram (billionth of a gram) per cubic metre.

NB: The values indicated are maximum values taking into account the threshold detection value when the real value is below the latter.

Waste dumped in landfill installations in tonnes

Dangerous waste transported to the ISDD (landfill sites reserved for dangerous waste)

VILLEPARISIS from:	
UIOM Ivry-Paris XIII	15,288
UIOM Isséane	8,533
UIOM Saint-Ouen	13,952
TOTAL ISDD	37,773

Inert waste transported to the class 3 CET (landfill sites)

CLAYE-SOUILLY from:	
Construction debris (Saint-Denis centre)	2,416
Construction debris (lvry waste reception centre)	3,367
Construction debris (Centre de Romainville)	8,370
Construction debris sorted in the Claye- Souilly centre	13,611
TOTAL CLASS 3 CETS	27,764

reserved for non-dangerous waste)	
BOUQUEVAL from:	
Reject bulky waste (Saint-Denis centre)	2,617
Household waste (Romainville centre)	51,959
Total	54,576
CLAYE-SOUILLY from:	
Household waste (direct inputs)	87,328
Household waste (Romainville centre)	111,719
Household waste (HWIU lvry-Paris XIII)	29,743
Household waste (HWIU Saint-Ouen)	26,425
Household waste (HWIU Isséane)	9,289
Rejects from selective collections and declassifications (Sevran centre)	577
Reject bulky waste (Saint-Denis centre)	4,036
Reject bulky waste (Bonneuil/Marne centre)	10,592
Reject bulky waste (Claye-Souilly centre)	48,080
Total	327,789
SOIGNOLLES-EN-BRIE from:	
Romainville centre	23,488
HWIU Ivry-Paris XIII	3,349
UIOM Isséane	1,103
HWIU Isséane	27,940
TOTAL ISDND	410,305
	475,842

Non-dangerous waste transported to the ISDND (landfill sites

TECHNICAL AND FINANCIAL REPORT

OPERATING SUMMARY 2008⁽¹⁾

Figures in brackets correspond to 2007 data

44

Total materials recovery 698,625 tonnes i.e. 27 % of waste (633,184 tonnes)

of which clinkers, ferrous and non-ferrous 367,062 tonnes (313,744 tonnes)

Total energy recovery Household waste + declassification + rejects 1,731,472 tonnes

i.e. **54** %^{*} of waste (1,426,694 tonnes)

Total SYCTOM landfill in landfill sites reserved for non-dangerous waste Household waste + declassification

337,380 tonnes i.e. **17** % of waste (662,181 tonnes)

Household waste + declassification + rejects

473,631 tonnes i.e. 19 % of waste (830,237 tonnes)

Recycling	117,008 tonnes (118,634 tonnes)
Incinerated rejects	32,861 tonnes (24,895 tonnes)
Rejects sent to landfill site	17,033 tonnes (22,858 tonnes)

Recovery	86,895 tonnes (75,174 tonnes)
Rejects sent to landfill site	105,542 tonnes (127,385 tonnes)

Recovery	15,282 tonnes (20,071 tonnes)
Incinerated rejects	828 tonnes (707 tonnes)
Rejects sent to landfill site	13,371 tonnes (17,290 tonnes)

Evacuated clinkers	328,662 tonnes
	(278,579 tonnes)
Ferrous sold	36,079 tonnes
	(33,126 tonnes)
Non-ferrous sold	2,321 tonnes
	(2,039 tonnes)
REFIOM	41.691 tonnes
	(33,506 tonnes)
Electricity sold	103,615 Mwh
	(129.611 Mwh)
Steam sold	3,386 Mwh
	(33,036 Mwh)
Steam sold (CPCU)	2,541,579 Mwh
	(2,147,651 Mwh)

118,108 tonnes (109,272 tonnes)	
Private centres 48,794 tonnes (57,115 tonnes)	
SYCTOM centres 96,416 tonnes (114,090 tonnes)	
Private centres 96,020 tonnes (88,470 tonnes)	
SYCTOM waste reception centres 29,286 tonnes (38,067 tonnes)	
SYCTOM HWIUs 1,527,006 tonnes (1,172,392 tonnes)	
Private HWIUs 55,684 tonnes (84,508 tonnes)	
Landfill sites reserved for non-dangerous waste 68,806 tonnes (52,091 tonnes)	
SYCTOM HWIUs 99,005 tonnes (7,630 tonnes)	
Private HWIUs 16,088 tonnes (1,917 tonnes)	
Landfill sites reserved for non-dangerous waste 180,942 tonnes (348,854 tonnes)	
Direct inputs 87,328 tonnes (71,569 tonnes) declassifications 304 tonnes (209 tonnes)	

Recycling

112,378 tonnes (105,982 tonnes)

* Clinkers, ferrous and non-ferrous are subject to materials recovery. To avoid a double count, this percentage was calculated by subtracting these materials from the total energy recovery tonnage.

ANNUAL REPORT

ANNUAL REPORT ON THE PRICE AND QUALITY OF THE PUBLIC WASTE DISPOSAL SERVICE

(in application of order no. 2000-404 of 11 May 2000). Technical and financial indicators for 2008.

SYCTOM CENTRES AND TONNAGES PROCESSED

3 incineration centres

with energy recovery

(In tonnes)	Capacity	Quantity
Ivry-Paris XIII	730,000	669,030
Saint-Ouen	630,000	607,504
lsséane	460,000	371,067

5 selective collection sorting centres

(In tonnes)	Capacity	Quantity
Nanterre	40,000	34,789
Ivry-Paris XIII	36,300	38,612
Romainville	45,000	41,316
lsséane	20,000	12,514
Sevran	10,000	3,168

3 bulky object pre-sorting centres

(In tonnes)	Capacity	Quantity
Saint-Denis	60,000	30,785
Romainville	75,000	65,182
Isséane	35,000	449

1 transfer centre

(In tonnes)	Capacity	Quantity
Romainville	350,000	300,748

3 waste reception centres

(In tonnes)	Quantity
Ivry-Paris XIII	5,413
Saint-Denis	4,343
Romainville	19,726

PRIVATE CENTRES USED BY SYCTOM AND TONNAGES PROCESSED

Incineration centres

(In tonnes)	Operator	Quantity
Argenteuil	Novergie	44,653
St-Thibault-des-Vignes	Novergie	29,470

Sorting centres

(In tonnes)	Operator		Quantity
Arcueil	SITA	BO:	14,564
Buc	Nicollin	SC:	7,387
		BO:	10,581
Chatillon	Veolia	BO:	389
Chelles	Généris	SC:	7,956
Claye-Souilly	REP	BO:	4,663
Gennevilliers	REP	BO:	266
Gennevilliers	SITA	SC:	13,517
		BO:	30,135
lvry	CFF	BO:	35,006
lvry-Blanc-Mesnil	Paprec	SC	20,245
Villeneuve-le-Roi	Veolia	BO:	416

Landfill sites reserved for dangerous or non-dangerous waste

(In tonnes)	Operator	Quantity
ISDD ⁽¹⁾ Villeparisis	SITA	Refiom ⁽²⁾ : 37,773
ISDND ⁽³⁾ Bouqueval	REP	54,576
ISDND Claye-Souilly	REP	327,789
ISDND Soignolles-en-Brie	SITA	27,940
CET 3 ⁽⁴⁾ Claye-Souilly	REP	27,764
Other ISDND (excl. SYCTOM contracts)		s) 61,643

This document will be put to a vote by the Committee of the SYCTOM of the Paris agglomeration during its meeting of 24 June 2009.

ISDD: Dangerous waste landfill installations.
 REFIOM: Residues from smoke-scrubbing after household waste incineration.
 ISDND: Non-dangerous waste landfill installations.
 Class 3 landfill centres receive inert waste (construction debris).

Overall annual balance sheet

No. of municipalities in SYCTOM's scope	No. of inhabitants in SYCTOM's scope	Gross	tonnages of wast		Selec	tive collect	ions	Fe	es
	2006 population survey and supplementary surveys to 2008	household waste, sweepings and green waste	bulky objects	NHIW	Newspapers and magazines, multi-materials, paper and cardboard	glass	waste collection centre	per capita	per tonne
85	5,682,721 for 85 municipalities	2,039,875 t, i.e. 371.2kg/ person/year	192,436 t, i.e. 37.5kg/ person/year	848 t	166,903 t, i.e. 31.8kg/ person/year	1,954 t	29,436 t	€7.07	€90.07

Income and expenditure

Terms of operation of the disposal service awarded to SYCTOM of the Paris agglomeration	public contracts
Annual amount of expenditure for processing waste by SYCTOM (total real expenditure section of operation 2008 administrative account - Excluding provisions)	€288.3m
Terms and conditions for financing the general processing service	Contribution from local authorities, Eco-Emballages support for selective collections, product sales
Terms and conditions for setting the special fee for the disposal of assimilated products	NA
Annual total of main contracted services in €m incl. tax	€165.7m incl.tax
Overall cost per tonne of waste picked up from the bulky object rejects service (processing or landfill) and including transport and and storage of rejects in landfill	€102.81 /t
Overall cost of processing selective collections	€201.39 /t (€74.40 excluding SYCTOM support)
Overall cost of incineration with energy recovery	€68.92 /t
Cost of landfill	€91.46 /t
Income from access rights to processing and landfill centres at which the local authority is the project owner for assimilated waste	NA
Reversal for the selective collection	Multi-materials excluding glass, newspapers and magazines, office papers and single-material cardboard: €125.89 /t ; Multi-materials with glass: €110.65 /t CS.
Itemised amount of aid received from certified bodies: Support per sorted tonne Eco-Emballages Eco-Folio	15.2 million euros 2.8 million euros

Recovery

Recovery from incineration	Multi-material recovery	Recovery of bulky objects	Recovery in waste reception centres	Recovery in composting unit	Landfill
Electricity: 103,615 MWh Steam: 2,541,579 MWh Clinkers: 328,662 t Ferrous: 36,079 t Non-ferrous: 2,321 t	117,008 t of plastic, paper and cardboard, newspapers and magazines, steel and aluminium, small electrical appliances	86,895 t of wood, scrap metal, cardboard boxes	15,282 t	0 t	473,631 t

Recovery of material from sorting (selective collection and bulky objects) and from incineration (in \in m excl. tax):

- Newspapers/magazines: €5.15m
- Plastic: €2.31m
- EMR packaging: €2.06m
- Paper mix: €0.01m
- Steel: €0.29m
- Aluminium and scrap metal from bulky waste: €1.64m
- Non-ferrous bulky waste: €0.07m
- Glass: €0.007m

Recovery of material from incineration (in €m excl. tax):

- Scrap metal: €2.57m
- Aluminium from incineration: €1.10m
- Large scrap metal and other: €0.32m

TOTAL income from materials recovery: €15.527m

Energy recovery (in €m excl. tax):

- Sale of steam (Isséane): €3.75m
- Sale of steam and electricity (Saint-Ouen and Ivry-Paris XIII): €30.55m

TOTAL income from energy recovery: €34.3m

SYCTOM'S PARTNERS

*** île**de**France**

A number of public and private partners work alongside SYCTOM to help it fulfil its public service mission: state services, public bodies, local authorities and companies.

- The European Union is implementing a common environmental policy. In particular it acts in the field of waste management. Its directives are transposed into French law by the State.
- The French Ministry for the Environment, Energy, Sustainable Development and Planning sets the major objectives in terms of waste management and 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, etc.).
- ADEME (Agency for the Environment and Energy Management) is a public agency under the joint authority of the Ministries responsible for the Environment and Sustainable Development, and for Industry and Research. It helps local authorities to make improvements in the area of sustainable development, particularly in waste management.
- The Prefects grant operating authorisations to waste processing centres. 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 the activities of the energy recovery plants in their départements and provide information to the public.
- The Ile-de-France regional authority is an important SYCTOM partner. Since 2005, and the law on local freedoms and responsibilities, it has been responsible for drawing up a regional waste disposal programme. Following a project jointly launched in 2006, the implementation of PREDMA is scheduled for 2009. The Regional Authority also provides investment income to the Syndicate in the framework of the Terres Vives contract.
- The General Councils draw up or help to draw up, with the Prefects, the Departmental plans for household waste disposal, and are responsible for monitoring them until the implementation of the regional plan.
- 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 community initiatives. They also provide member local authorities with information, coordination and help them with decision-making and to monitor collections.
- Eco-Emballages, a state-certified private company, supports the establishment and development of the selective collection, sorting, recycling and recovery of energy from domestic packaging. It receives a

financial contribution from the companies which manufacture and market packaged products for domestic consumption and redistributes the majority of it to local authorities. In 2008, SYCTOM received €15.2m from Eco-Emballages.

- OCAD3E (Certified coordinating body for e-waste) is a subsidiary common to the four eco-organisations responsible, since November 2006, for the technical and economic management of the e-waste channel. This body is the interface between the local authorities and eco-organisations such as Recyclum (lamps only), Eco-systèmes, Ecologic and ERP.
- ÉcoFolio is an eco-organisation which since 2007 has been responsible for managing the eco-contributions from the publishers of free printed leaflets in order to pay for the recycling of their products (books, public service documents, the press and magazines which are not free are exempt). It subsidises local authorities for the collection and disposal of the flows generated, in particular by the distribution of unsolicited mail. In 2008, SYCTOM received €2.8m.
- ◆ CPCU (Paris Urban Heating Company) and EDF buy the steam and electricity produced in SYCTOM's three incineration units. In 2008, the Syndicate sold 2,544,965 MWh of steam and 207,718 MWh of electricity, for a total sum of €34.3 million.
- All SYCTOM's centres are run by private companies, selected after calls for tender. TIRU runs the lvry-Paris XIII waste sorting centre. Généris (a subsidiary of Veolia Propreté) runs the sorting centres in Saint-Denis, Nanterre and Sevran. Urbaser Environnement has run the sorting centre in Romainville since 22 June 2008 (previously Généris). SITA runs the lvry-Paris XIII sorting centre. TIRU and SITA formed the company TSI to run Isséane.
- In order to add to its processing capacity, SYCTOM uses services provided by external centres run by contractors: SITA runs the selective collection sorting centres in Gennevilliers, the bulky objects unit in Arcueil and Gennevilliers as well as the dangerous waste landfill installation in Villeparisis and the nondangerous waste landfill installation in Soignolles. Nicollin runs the Buc sorting centre, Généris the centre at Chelles and PAPREC that at Blanc-Mesnil. Veolia Propreté runs the bulky objects unit in Chatillon and in Villeneuve-le-Roi, CFF that in lvry. The REP runs the bulky objects units in Claye-Souilly and Gennevilliers, the non-dangerous waste landfill installation in Claye-Souilly and Bouqueval and the class 3 landfill installation in Claye-Souilly. The company Novergie runs the energy recovery centres in Argenteuil and in Saint-Thibault-des- Vignes.
- Finally, the clinkers from SYCTOM energy recovery centres are processed by MRF, REP and TIRFER.

GLOSSARY

→ Biogas: gas produced by the biological breakdown of organic matter in the absence of oxygen. This fermentation process occurs in nature and in landfills containing organic waste, and also in methanisation processes. Biogas is mainly composed of methane and carbon dioxide.

→ **Biomass:** this covers all organic waste used to produce heat or electricity, including the organic waste contained in rejects. This source of energy has no impact on global warming insofar as the CO_2 released when it is burned is considered to have already been absorbed by plants during their growth.

→ B0 (Bulky or oversized objects): household waste too large to be put in a household bin (large electrical appliances, furniture, etc.).

→ Carbon balance: this is a method for calculating greenhouse gas (GHG) emissions developed by Ademe using data on direct and indirect activities and on all forms of human organisations.

→ 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 Préfecture, and those subject to the Prefect's authorisation after a public enquiry, such as waste processing facilities.

\rightarrow Clinkers or slag:

non-combustible residues produced at the outputs from incineration furnaces. After ageing, they can be used in road works.

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

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

→ e-Waste (Electrical and electronic 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 order of 20 July 2005 makes selective collection and processing of electrical and electronic waste compulsory.

→ ELA : packaging for drinks, such as brick packs.

→ EMR : thin, light cardboard packaging for food (cake packets, outer packaging for yoghurts, etc.).

→ Energy recovery: procedure consisting of using the calories contained in waste by burning or fermenting it to recover energy in the form of heat, steam or electricity.

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

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

→ GHG (greenhouse gases): these contribute to the creation of a greenhouse effect which retains heat around the earth. An over-concentration of GHG interferes with the climate. They can be natural (carbon dioxide, methane and ozone) or produced by mankind (such as carbon dioxide from burning fuels).

→ Housing equivalent: Standard 80m2 home occupied by 4 persons in a collective building built between 1995 and 2000.

→ Heavy metals: metals which, if they accumulate in the environment, pose dangers for human health, such as lead, cadmium and mercury.

→ HEQ (high environmental quality): the industrial buildings with which SYCTOM is equipping itself are designed following HEQ criteria.

→ HW (household waste): residual waste from daily household activity.

→ HWIU : household waste incineration unit.

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

> ISDD (Dangerous waste landfill installations) and ISDND (non-dangerous): store waste

whilst respecting the environment. ISDD (formerly class 1 CET) receive dangerous waste (REFIOM, asbestos, polluted soil, etc.). ISDND (formerly class 2 CET) receive so-called non-dangerous residual waste (cf. Royal law of 1992) (household waste, selective collection rejects, bulky rejects, DIB, etc.). Class 3 landfill centres receive inert waste (construction debris).

→ Leachates: water which, after percolating through waste stored in landfill, carries bacteria and chemicals. It causes pollution and must be treated before it can be returned to the natural environment.

→ Materials recovery: recovery of waste by using its component materials, like regenerating used oil and recycling newspapers and magazines or packaging materials.

→ Methanisation: a treatment leading to the production of biogas by the anaerobic breakdown of organic waste. It is a source of energy recoverable as fuel.

→ NM : newspapers and magazines.

→ Non-hazardous industrial waste: waste from industry which can be processed in the same facilities as household waste.

→ Organic matter recovery: the recovery of organic waste, by composting for example.

→ 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.

→ 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. (Source: European directive 1991).

→ REFIOM (Residues from smokescrubbing after household waste incineration): residues from household waste incineration plants, made up of particle removal residues and residues from the smoke-scrubbing process. They are processed or stabilised before being placed in a site for dangerous waste.

→ Rejects (undesirables) : excessively dirty packaging or materials which cannot be recovered for recycling.

→ 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).

→ SC (Selective collection): the collection of waste pre-sorted by residents for recycling (packaging, newspapers and magazines, glass).

→ SEA: small electrical appliances.

→ TOE (tonne of oil equivalent): a measurement with which all types of energy can be compared to oil. Example: 1,200 litres of fuel = 1 TOE.

→ 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).

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