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Publication director:
François DAGNAUD

Editors in chief:
Dominique Labrousche, Emmanuel
Borde-Courtivron

Director of
communications:
Véronique Menseau

Coordination:
Christelle Pichon,
Cécile Jean

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Sophie Robichon/
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Gilles Plagnol/
Saint-Cloud
Stains Yann Rossignol/
Meudon,
Saint-Mandé

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Written by:
Monik Malissard

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Glossary

92%
of the inhabitants
in Syctom's sphere
involved in
a local prevention
plan

85%
total rate of
self-financing

+35%
increase in sales
of materials
(SC, bulky objects
and clinkers)

1
commissioning
of the selective
collection sorting
centre in
Paris XV

69%
Rate of recycling
for materials
from selective
collection

+6%
increase in
sales of steam
and electricity

2,000
composters
delivered to
member local
authorities

-43,000
tonnes
of waste buried
(HW)

420
kg/person/year
household waste
in Syctom's
sphere

€88.2
million
investment
expenditure

+42%
increase in visitors
to Syctom's
installations
in 2011

1
new
Eco-Emballages
scheme

€21.9
million
for selective
collection granted
to member
municipalities

+14%
Syctom's
contribution to
the ADEME
budget through
the TGAP tax



"2011: a year of responsible advances"

Sense of responsibility and capacity for initiative: 2011 clearly demonstrated the spirit which drives Syctom. Thanks to the work of all our teams and the officials of the syndicate committee, important and operational advances were made for the development of urban ecology.

The implementation of "Metropolitan Waste Prevention 2010-2014" and the unprecedented amount of resources allocated to the prevention and support of selective collections clearly demonstrate Syctom's efforts to reach the waste reduction and recycling objectives set by the Grenelle laws and the Paris PREDMA.

They also bear witness to the territorial solidarity adopted by Syctom, which is also illustrated in the signing of a collective contract with Eco-Emballages and the debate on governance launched to pool metropolitan resources and rationalise the management of the public waste collection and processing service.

But the sustainable city is also being developed through important investments. Thanks to strict management methods, Syctom is preparing to continue its debt reduction, which it has been doing for three years running. With the commissioning of the first selective collection sorting centre in 2011 and the approval of the final schedule for the planned organic and energy recovery centre in Ivry-Paris XIII, Syctom is firmly committing itself to following an ambitious and innovative path which will pave the way for waste processing in the metropolitan area of tomorrow.

While the legal framework for waste management is constantly changing, we are committed to making clear choices, taken in consultation, to provide the inhabitants of the metropolitan area a highly effective public service in urban ecology.

REFERENCE POINTS 2011

Business indicators

2.4 million tonnes of waste processed by Syctom
420kg/year/person

-4% of waste processed by Syctom since 2008*

+2.1% inhabitants in Syctom's sphere since 2008

COLLECTION CHANNELS

Selective collection	174,140 t	7%
Bulky objects	188,969 t	8%
Syctom's waste reception centres	21,852 t	1%
Residual household waste	2,021,726 t	84%

PROCESSING CHANNELS**

Sorting and recycling

16% **384,961 t**

Incineration

70% **1,690,142 t**

Landfill

14% **329,249 t**

RECOVERY

Materials recovery

577,819 t

including

Paper, cardboard, plastics,
metal, recyclable wood, etc.

221,889 t

Incineration residues

recoverable

356,147 t

Energy recovery

Steam sold

2,427,604 MWh

Electricity sold

181,931 MWh

Financial indicators

BUDGET

Total expenditure	t431,938,011
Management, usage, treatment	t343,704,807
Investment	t88,233,204

COST OF PROCESSING PER TONNE

Sorting selective collections	t225.92
Bulky objects	t100.02
Incineration with energy recovery	t83.59
Landfill (transport included)	t92.20

* Reference year for the Environment Grenelle

** Excluding stock from the tank of the Romainville transfer centre of 2088 t

HIGHLIGHTS

JANUARY

- Change of signature and identity for Syctom of the Paris agglomeration which becomes Sycdom, the Metropolitan agency for household waste.
- Administrative authorisation to operate the future multi-channel centre in Romainville/Bobigny granted after being checked by the departmental committee for the environment and health and technological risks.



FEBRUARY

- Novergie (GDF Suez) resumes operation of the incineration unit with energy recovery at Ivry-Paris XIII.

MARCH

- Syndicate committee adopts financial contributions made to member local authorities as part of the Metropolitan Waste Prevention 2010-2014 plan.
- Launch of a tender for the expanded characterisation of the deposit entering into Sycdom's sorting centres.

APRIL

- Commissioning of the first selective collection sorting centre in the 15th arrondissement of Paris.
- Sycdom participates in the Sustainable Development Week, distributing to its member local authorities and associations a kit to raise awareness of home composting.



JUNE

- First Open Day organised in the selective collection sorting centre in Paris XV: 382 visitors.
- Syndicate committee approves the programme and launch of a competitive dialogue on the future organic and energy recovery centre in Ivry-Paris XIII.
- Syndicate committee adopts environmental quality guidelines for the Ivry-Paris XIII centre.
- Public information meeting at Ivry-sur-Seine on the finalised programme for the transformation of the Ivry-Paris XIII centre.
- Signing of an action contract for the bareme E scheme (CAP) with Eco-Emballages, 2011 - 2016.
- Syndicate committee approves new contracts for the sale of secondary raw materials with recyclers.
- Studies launched on the architectural and urban. Integration of the incineration unit with energy recovery in Saint-Ouen.
- Final decision of the Paris administrative tribunal favourable to Sycdom, relative to the method for calculating recovery of VAT on the sorting of household packaging waste, or savings of €5 million.
- Bureau officials launch a debate on the Improvement Programme for collecting and processing household waste (Waste PACT) and metropolitan governance.

SEPTEMBER

- 2 groups of candidates approved for the competitive dialogue procedure for the construction and operation of the future organic and energy recovery centre in Ivry-Paris XIII.
- Tender Commission awards study contract to accompany local authorities in drawing up a local prevention plan and a contract for the provision of composters and for the training of users on the use of composters.

OCTOBER

- Awarding of the contract for development works at the selective collection sorting centre in Sevrans with a view to launching the experiment on extending the recommendations for plastic sorting.
- Syctom participates in "Entrée en matière", the 6th edition of exhibitions at the Trocadéro initiated by the CNRS: 23,000 visitors.
- 2,000 composters delivered as part of the 1st campaign for delivering domestic organic waste composters to local authorities.



- Committee decides not to reconstruct the pre-sorting of bulky objects centre in Saint-Denis.
- Syctom takes part in the regional consultative committee for inter-municipal cooperation on the advancement of departmental inter-municipal cooperation schemes.
- Syctom signs a partnership agreement with the Andean Development Corporation (CAF), the South American public development bank which supports sustainable development projects developed by local authorities.
- Launch of the first student competition Zero Waste Design as part of Metropolitan Waste Prevention 2010-2014 in the eco-design sector

NOVEMBER

- Launch of a study by officials on the challenges of metropolitan governance of the public waste elimination service. It is concerned with bringing collection and processing skills closer with a view to promoting better efficiency in the public service through the standardisation of recommendations and sharing of facilities.
- Local prevention seminars organised for member local authorities.
- Syctom takes part in the European Waste Reduction week, distributing to its member local authorities a giant sign bearing a prevention message.
- Regulatory texts relating to the strengthening of the contribution made by the State to the methanisation channel.
- Syctom and 11 member local authorities (390,000 inhabitants) undertake to participate in the experiment on the extension of the recommendations for plastic sorting in signing an agreement with Eco-Emballages.

DECEMBER

- 5th meeting of the steering committee of Metropolitan Waste Prevention 2010-2014.
- Approval of a partnership and cooperation agreement with SIEVD (Rungis) with a metropolitan approach.

12 JULY 2011 DECREE RELATIVE TO THE PREVENTION AND MANAGEMENT OF WASTE

This text incorporates the waste framework directive (2008) into French law and also brings into effect several measures adopted as part of the Environment Grenelle: the reform of territorial planning of household waste (in particular, it states that the accumulated capacity of landfill and incineration facilities will, at the end of 12 years, be limited to 60% of non-dangerous, non-inert waste produced in each département, waste from industrial activities included); management of worksite waste; the separate collection of organic waste from large producers with a view to its recovery.

1.





13
processing
units

118
public
agents

84
municipalities

68
officials

13
EPCI

801
employees
of operating
companies

5
departments
in the
Paris region

5.7
million
inhabitants

SYCTOM in brief

TOWARDS A SUSTAINABLE CITY

Syctom, the French agency for household waste, carries out a public service mission in urban ecology. It processes and recovers household waste from half of all inhabitants in the Paris region, or almost 10% of the national population. Through its commitments, its mobilisation and carrying out its activity, it helps to promote sustainable development and reach the targets set by national and regional policies in the area of waste management. Driven by a territorial solidarity approach, it brings a global view to the challenges of metropolitan planning in the Paris region. Favouring exchange and dialogue, it is in touch with the needs of society in terms of building a sustainable city.

A PUBLIC PLAYER SERVING THE PARIS REGION

A public establishment **managed collectively** by local officials

Syctom, the French agency for household waste, is a **public administrative establishment**. Set up in 1984, **it brings together 84 municipalities** in France's most densely-populated district: it works for 5.7 million people, or half the population of the Paris region, 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) with which it works in partnership.

Syctom is run by a **syndicate committee**. **Made up of 68 local officials** representing the 84 local

authorities, it defines Syctom's policy, votes on its budget, decides on investments to be made and the management methods used. It gives its opinion on requests for members and departures of local authorities. It elects the 36 members of the Bureau, which prepares its deliberations. The tender commission is made up of five members elected by the syndicate committee and placed under the authority of the Chairman of Syctom. In accordance with the code for government contracts, it ensures the validity of applications and the competitiveness of offers before awarding contracts. In 2011 it met 11 times.

A public service in **urban ecology**

Syctom carries out a **public service mission**, as defined by the French general code of local authorities and the Environment code: **the processing of waste produced by households** in its sphere. Its member municipalities have delegated it this mission⁽¹⁾ but have retained the responsibility to carry out collections.

Syctom processes **household and associated waste**: paper and packaging from selective collections (with the exception of glass⁽²⁾), residual household waste, bulky objects and waste deposited in the landfill centre by households; waste from tradesmen, shopkeepers and service providers which is collected together with that of households. Concerned with assuming its full responsibility, **the syndicate has its own industrial facilities** which it maintains, modernises and develops in accordance with a multiyear investment programme:

In its own installations **It sorts recyclable waste and incinerates household waste**, recovering the energy generated by burning fuel.

However, its centres are not sufficient compared to the processing needs.

It is currently using external facilities, chosen through public tender processes, to offset its lack

in capacity. In the medium to long-term, its strategy is to **have autonomy of resources**. It invests to process household waste which is produced in its sphere, in accordance with the community logic principle prescribed by the environmental law. Its objective is to ensure better management of the public service without being subject to the varying availabilities of private units.

As part of a public tender process and without resorting to public service delegations, Syctom **entrusts the operation of its facilities to private companies**. This contractual framework allows it in particular to ensure the correct usage of its installations, to directly bring its work up to the required standard in terms of regulatory changes and to conduct all the controls it deems necessary to ensure the proper operation and safety of its centres.

Syctom's engineers lead research to explore possibilities for technical development in its installations, carrying out investment projects, reducing atmospheric emissions, limiting environmental and health risks, etc. **Syctom's engineering expertise** is a key asset that promotes quality and independence in the public service.



SITOM93 AND SYELOM: 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 partnership with Syctom takes place within the framework of objectives agreements, through which the latter provides financial as well as technical assistance and supports their communication campaigns. SYELOM and SITOM93 help Syctom to implement its waste prevention plan. They organise prevention actions in their area with a view to drawing up and implementing local prevention programmes.

(1) However, certain local authorities have concluded direct contracts with private operators to process their green waste or materials received in their landfill centre.

(2) Glass collected by municipalities which are Syctom members is directly processed by the companies in the recycling sector.

A COMMUNITY LOGIC

The law of 13 July 1992 relative to the elimination of waste and to classified installations for the protection of the environment provides for the organisation of the transport of waste by processing and eliminating it nearby. This community logic also appears in the Environment code and was reasserted by the 2008 waste directive as well as by the regional plan for the elimination of household and associated waste (PREDMA).

SYCTOM'S SPHERE

- 34 municipalities excluding
inter-municipal groupings
Paris
CA Grand Paris Seine Ouest
CA Cœur de Seine
SEAPFA
CA Plaine Commune
CA Sud de Seine
CA Val de Bièvre

- CA Est Ensemble
- CA du Mont Valérien
- CA Seine Défense
- CC Charenton - Saint-Maurice
- CC Chatillon - Montrouge
- CA Versailles Grand Parc
- CA of Bourget Airport
- CC Clichy - Montfermeil

- ✉ SITOM93
✉ SYELOM

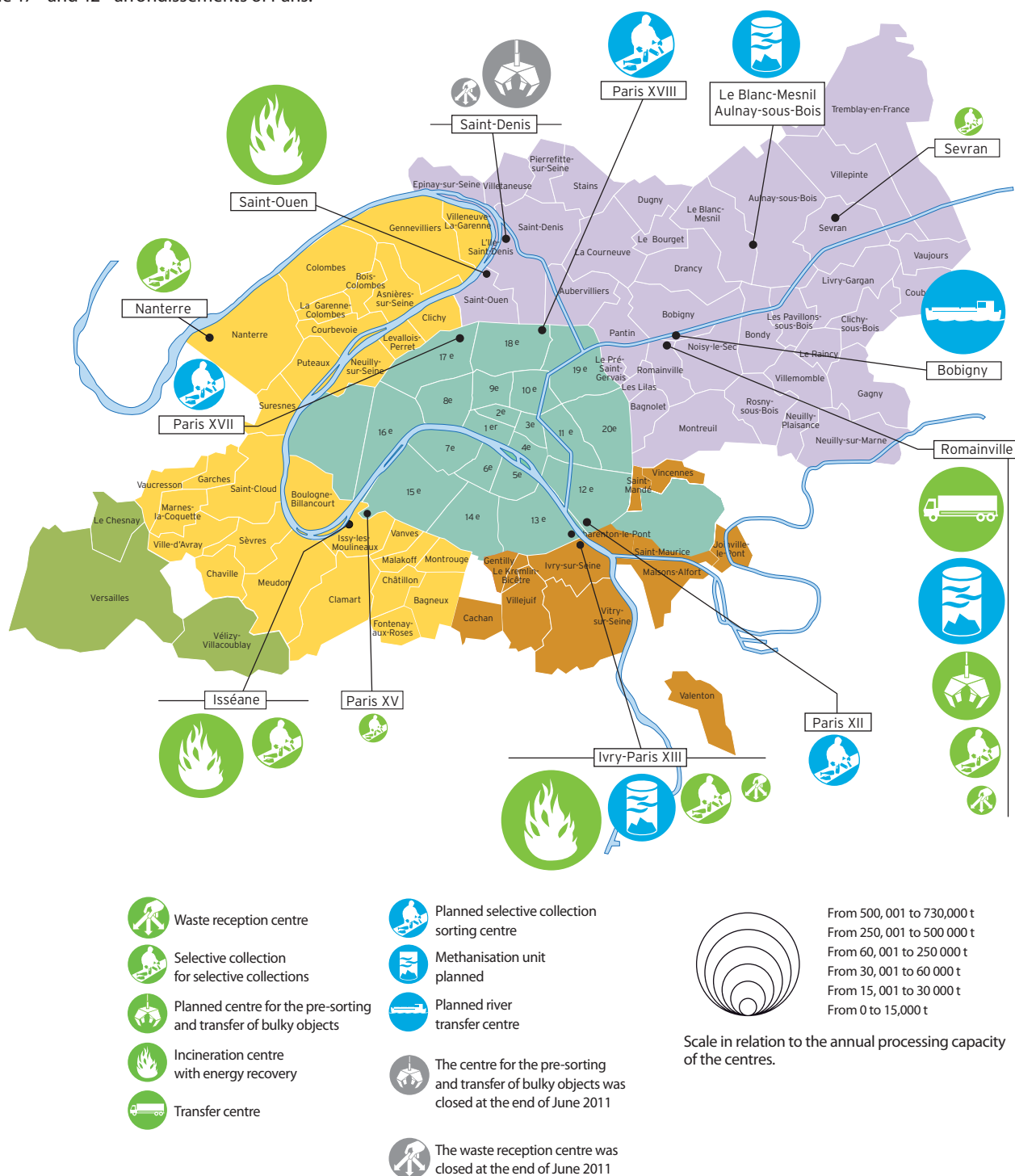
CA: agglomeration community
CC: community of local authorities



SYCTOM'S INSTALLATIONS

Syctom has 13 processing units spread out over 8 municipalities: 6 selective collection sorting centres, 2 landfill centres, 1 waste reception centre, 1 residual household waste transfer centre, 1 pre-sorting and transfer of bulky objects centre and 3 incineration units with energy recovery. In 2011, it also mobilised 2011 private installations.

The following are planned: 1 methanisation unit in Romainville and a river platform in Bobigny, the reconstruction of the selective collection sorting centre and the pre-sorting of bulky objects centre in Romainville, 1 sorting-methanisation unit and 1 incineration plant with energy recovery replacing the incineration plant in Ivry-Paris XIII, 1 centre for the methanisation of silt and organic waste in Blanc-Mesnil/Aulnay-sous-Bois, and 2 selective collection sorting centres in the 17th and 12th arrondissements of Paris.



Syctom serving its member local authorities

On top of its waste processing mission, Syctom supports the waste management policy followed by its member local authorities, providing them with multiple services.

It guides them in their **actions for raising public awareness**. As part of this guidance, it develops resources and materials that each local authority can implement at its own scale. It designs tools that it makes available to them free of charge for events (exhibitor stands, display cases, etc.) or that they can use permanently (educational film, activity kits, etc.). It makes documents designed to make work easier for sorting ambassadors and collection service technicians in contact with the public.

Syctom also provides **technical advice** to its member local authorities through the support of SITOM93 and SYELOM. It guides them in the implementation of their prevention policy, organis-

ing information and exchange meetings, creating synergies between players in the sphere, sharing good practices, providing methodological support, organising training sessions, etc.

The metropolitan agency for household waste also awards grants for the construction of waste reception centres, recycling plants, the deployment of local prevention programmes, improving selective collections, etc.

Finally, Syctom is constantly thinking of ways in which to reduce its burden on local taxes. It is with this in mind that it has committed to **controlling its expenditure** in order to limit the changing pace of fees that its member local authorities pay it to process their inhabitants' waste. It optimises its costs by pitting the competition against each other when renewing its operating contracts and by negotiating ceiling prices for recovery of materials.



REFLECTING ON METROPOLITAN GOVERNANCE

The two meetings of the Bureau demonstrate Syctom's commitment to engage in a broad debate on an improvement programme for collecting and processing household waste (waste PACT). While respecting the autonomy of the local authorities, it would involve simplifying organisation, bringing skills together, standardising practices and sharing operations and resources in order to streamline the public service for waste management at a metropolitan level and reach the prevention and recycling objectives set by the public authorities. Agreements to this end have already been signed with SIGIDURS (Sarcelles) and SIEVD (Rungis) with a view to strengthening metropolitan solidarity.

A proactive force on the public arena

Syctom has an overview of the production and processing of waste management in the Paris region. Serving some 10% of the French population, its involvement is essential to reach the objectives set at a national and regional level in the field of waste management.

This is why it expresses itself on the public arena with a view to **promoting the waste management solutions that are the most compatible with sustainable development**. It has focused in particular on improving methods of governance of eco-organisations and the system for funding selective collections, and promoting eco-design of products.

Driven by an approach based on solidarity throughout the Paris region, and used to promoting collective challenges while complying with diversity and the identity of the units that make it up, Syctom is also **a pioneer in metropolitan governance**. As such, it is attentive to territorial dynamics which result in demographic changes and structural projects such as Le Grand Paris, territorial development contracts and it wishes to put its experience and skills at the disposal of the open debate on the governance of the Paris region. It also brings its expertise to local authorities in foreign countries.

COOPERATION WITH SOUTH AMERICA

Syctom has signed an agreement with the Andean Development Corporation (CAF), the South American public development bank which supports sustainable development projects developed by local authorities. It will deploy its expertise to improve the processing of household waste in South America and the governance of the units in charge of this public service.

A SUSTAINABLE WASTE MANAGEMENT STRATEGY



ALTERNATIVE TRANSPORT: A STRATEGIC LEVER FOR SYCTOM

Since 1995, Syctom has made the development of non-road transport one of its strategic priorities. In choosing sites for its facilities and in selecting industrial partners, Syctom takes into account the possibility of using "soft" modes of transport. The rebalancing of methods of transport is part of the guidelines of the European transport policy and the Grenelle law to limit nuisance related to road traffic: reduction of greenhouse gases, atmospheric and sound pollution, congestion, accident risks. The Paris PREDMA is also planning on using waterways and railways to a greater extent for the transport of waste.

A policy in line with European guidelines

For twelve years, Syctom has set itself strategic priorities which correspond to the guidelines set by the European Union in 2008 and which are reiterated in the Grenelle law and the Paris regional plan for the elimination of household and associated waste (PREDMA):

- to contribute to the prevention of waste, to limit quantities to be processed and their harmfulness
- to develop sorting and recycling
- to adapt its processing capacities to the quantities of waste produced in its sphere, following a community logic
- to diversify its methods of recovery, depending on the type of waste
- to reduce use of landfill as much as possible,
- to control the impact of its activities on public health and the environment
- to increase use of alternatives to road transport.

A priority: reducing waste production

As far back as 2004, Syctom launched a plan for preventing and recovering waste which helped reduce the quantities of household waste incinerated or sent to landfill by 210,000 tonnes per year.

Its prevention plan 2010-2014 continues and strengthens these efforts in order to help its local authorities to reach the national and regional waste reduction targets (-7% household waste per inhabitant within 5 years).

A wish: diversifying recovery modes

It invests in new installations to sort recycled waste and to recycle household waste, depending on its composition, into energy and/or compost. In particular, it develops methanisation projects for biodegradable waste. Sized on the basis of the foreseen drop in tonnage collected, its projects are designed to evolve over time.

A requirement: limiting environmental impacts

Syctom is attentive to reducing problems linked to its activities, whether they be atmospheric, odour or noise emissions or liquid waste. It bases its activities near waste production sites to limit road traffic. It sets them up and operates them with respect to the population and the natural and urban environments, favouring the best technical solutions.

It also utilises alternatives to road transport wherever possible.

A pro-active policy: acting in consultation and transparency

Using all available resources, Syctom informs the public about its mission and the challenges related to waste management via the website www.syctom-paris.fr/publications, information campaigns, tools to increase awareness, visits and open days at its installations and by participating in trade shows and exhibitions.

It extends its communication efforts to its member local authorities and all of their stakeholders, in order to throw light on its investment strategy, explain how its installations work, and to increase understanding of the methods implemented for the safety of its facilities and the protection of the environment.

As it believes that exchange and discourse is the only way to collectively improve waste management worldwide, Syctom involves many players in the waste chain in its activity – investment projects, operation of its sites and its prevention policy: officials and departments of its member local authorities, institutional organisations, locals living near

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. In signing up to these guidelines, Syctom, its project managers and operators commit to a number of objectives in terms of resident populations and local authorities which are home to its facilities. Their commitments concern, in particular, the preservation of resources, urban, architectural and landscape integration, limiting road traffic, minimising noise and odour problems, information and consultation with the public, environment education, professional integration and the quality of work conditions. A joint programme for monitoring and control has been set up to ensure that the objectives are being met.

its facilities, associations, State departments, etc.

Syctom organises annual sessions such as local information and monitoring committee meetings which are held in each of its incineration centres on the initiative of the prefect. If one of these meetings cannot take place, it informs the State of such. It regularly brings together committees for monitoring environmental quality guidelines which ensure that the commitments it has taken with the officials and its operational staff in terms of environmental protection and living conditions are respected. It also brings together the consultative commission of local public services which it set up, which is made up of syndicate officials and representatives of associations.

Syctom is making efforts to become more open to exchange with a view to improving its means of governance. The continuation of the consultation on the transformation of the Ivry-Paris XIII centre

as part of a partners' committee is proof of this, as are the introduction of locals acting as "watchmen" on its new sites and the setup of a steering committee to work on and ensure the execution of the "Metropolitan Waste Prevention 2010-2014".

Furthermore, in its institutional framework, Syctom is launching a collective study on the optimisation of waste collection and prevention prior to processing. It is carrying out comprehensive work with its member authorities to share knowledge. It is a framework that unites all parties in the greater Paris area to exchange on projects, experiences and tools to be developed. With this in mind, it involves its members in the studies it carries out – at the development stage and the handover of results – and takes part in steering committees set up at local level.

A FUNCTIONAL ORGANISATION

The Syndicate committee is supported by a **team of 118 employees**, public administrative and technical agents, mostly from the civil service. The communication, IT and telecommunications, contracts and legal affairs departments report directly to the Director General for Services.

Four 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, ensures follow-up of operating contracts, directs and coordinates the actions of the prevention plan
- the department for finance and general administration deals with the organisation and management of Syctom's resources
- the department for technical services is responsible for Syctom's new centres, for the modernisation of facilities and for the management of industrial heritage
- the deputy general management of Ivry-Paris XIII carries out the services relating to the existing centre and relating to the extension of the life of the centre and is steering the reconstruction project of this centre.

The private operators which manage Syctom's processing centres employ 801 people.

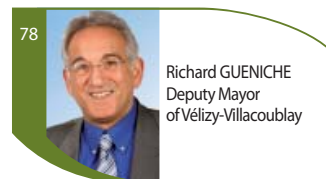
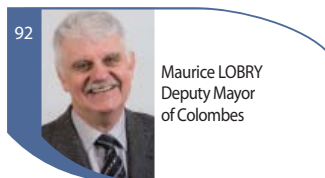
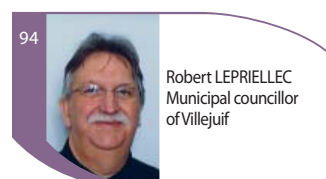
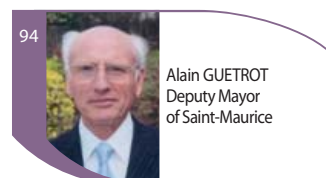
Syctom requires that they respect the legislative and regulatory provisions which govern their work and that they favour permanent positions and, for certain positions, that they hire disadvantaged persons in cooperation with the employment services of the municipalities. Syctom follows up on the answers provided to observations made by the health and safety committees (CHSCT) on working conditions.

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 air processing and sound-proofing in the sorting cabins. 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. Syctom also carries out a permanent awareness programme with its community members, regarding the quality of sorting at source, in particular to prevent the agents from being exposed to the health risks posed by hazardous medical waste.

DIRECTORY

◆ Members of the Bureau in 2011.

<p>75 ◆</p>  <p>François DAGNAUD Chairman of Syctom Deputy Mayor of Paris</p>	<p>75</p>  <p>Julien BARGETON Paris councillor</p>	<p>75 ◆</p>  <p>Sylvain GAREL Vice-Chairman of Syctom Paris councillor</p>	<p>75 ◆</p>  <p>Frédérique PIGEON Vice-Chairperson of Syctom Paris councillor</p>
<p>93 ◆</p>  <p>Alain ROUAULT Vice-Chairman of Syctom President of SITOM93</p>	<p>75 ◆</p>  <p>Michèle BLUMENTHAL Vice-Chairperson of Syctom Paris councillor Mayor of 12th Arrondissement</p>	<p>75 ◆</p>  <p>Fabienne GASNIER Paris councillor</p>	<p>75</p>  <p>Olivia POLSKI Paris councillor</p>
<p>92 ◆</p>  <p>Jacques GAUTIER Vice-Chairman of Syctom Senator-Mayor of Garches President of SYELOM</p>	<p>75 ◆</p>  <p>Pascale BOISTARD Deputy Mayor of Paris</p>	<p>75 ◆</p>  <p>Danièle GIAZZI Vice-Chairperson of Syctom Paris councillor</p>	<p>75</p>  <p>Catherine VIEU-CHARIER Deputy Mayor of Paris</p>
	<p>75 ◆</p>  <p>Yves CONTASSOT Paris councillor</p>	<p>75</p>  <p>Marie-Laure HAREL Paris councillor</p>	<p>DELEGATES OF SITOM93 (SEINE-SAINT-DENIS)</p> <p>93</p>
	<p>75 ◆</p>  <p>Alexis CORBIERE Vice-Chairman of Syctom Paris councillor</p>	<p>75 ◆</p>  <p>Jean-Marie LE GUEN Deputy Mayor of Paris Member of Parliament</p>	<p>93 ◆</p>  <p>Jean-François BAILLON Deputy Mayor of Sevran</p>
	<p>75 ◆</p>  <p>Seybah DAGOMA Vice-Chairperson of Syctom Deputy Mayor of Paris</p>	<p>75</p>  <p>Marie-Chantal BACH Paris councillor</p>	<p>93</p>  <p>Josiane BERNARD Municipal councillor of Bagnolet</p>
<p>REPRESENTATIVES OF THE CITY OF PARIS</p> <p>75</p>	<p>75 ◆</p>  <p>Rachida DATI Paris councillor Mayor of 7th arrondissement Paris</p>	<p>75</p>  <p>Helen MACE DE LEPINAY Paris councillor</p>	<p>93 ◆</p>  <p>Jean-Pierre BOYER Vice-Chairman Municipal councillor of Rosny-sous-Bois</p>
<p>75</p>  <p>Aline ARROUZE Paris councillor</p>	<p>75 ◆</p>  <p>Claire de CLERMONT-TONNERRE Paris councillor</p>	<p>75 ◆</p>  <p>Jean-Louis MISSIKA Vice-Chairman of Syctom Deputy Mayor of Paris</p>	<p>93 ◆</p>  <p>Joseph CITEBUA Municipal councillor of Neuilly-sur-Mame</p>
<p>75</p>  <p>Pierre AURIACOMBE Paris councillor</p>	<p>75</p>  <p>Laurence DOUVIN Paris councillor</p>	<p>75 ◆</p>  <p>Anne-Constance ONGHENA Paris councillor</p>	<p>93</p>  <p>François GIUNTA Deputy Mayor of Saint-Ouen</p>





2.

48%
Rate of
material
recovery from
bulky objects

30%
Percentage of
recoverable
product outflows
transported by
waterways

€28.5
million
support for
eco-organisations

Overview 2011

-4%

less waste
processed
by Syctom
since 2008

220kg

of clinkers and
metals are recovered
per tonne of
incinerated waste

69%

Rate of recycling
for materials
from selective
collections

53%

recovery of waste
of waste deposited
in waste reception
centres

18%

Rate of storage
in ISDND
(HW + reclassification
+ sorting rejects)

METROPOLITAN SOLIDARITY

In 2011, Syctom's activity was particularly marked by the operational implementation of the Metropolitan Waste Prevention 2010-2014 plan, the adoption of new contractual bases for the recycling channel, the approval of the project transforming the Ivry-Paris XIII centre and the commissioning of the selective collection sorting centre in Paris XV. The agency led its projects in consultation and placed metropolitan solidarity at the heart of its actions.

Syctom continued to invest daily to process 2.4 million tonnes of waste, develop the services which it provides to its member local authorities and try to change behaviour towards adopting more environmentally-friendly practices.

The change in waste processed per person continued to drop in 2011. It went from 438 kg/year/person in 2008 (reference year of the Environment Grenelle) to 420 kg/year/person in 2011, or a 4% decrease. Selective collections increased by 5% and bulky objects by 4%. Selective collections (174,140 tonnes) and their recoverable elements (120,921 tonnes) exceed the limits reached in 2007-2008. In terms of prevention and recycling, there is still room for improvement: 35% of waste thrown into a standard bin is made up of recyclable materials, and 19% of that placed in the recycling bin is not.

Tonnage incinerated went back to its 2009 level following halts in operation of the incineration units in Ivry-Paris XIII and Saint-Ouen in 2010. Despite this large increase (+87,240 tonnes) Syctom continued to send tonnage to landfill which is certainly decreasing (-45,623 tonnes). This situation shows that Syctom's installations are not oversized compared to the metropole's needs. It highlights the necessity to build urban ecology facilities that are fully integrated into the city.

In 2011, Metropolitan Waste Prevention 2010-2014 entered an operational phase. Adopted in 2010 following a year of consultation, it positions Syctom as the coordinator of the prevention dynamic in its sphere and an intermediary for the Paris region.

It is responsible in particular for helping its member local authorities involved in a local prevention plan to reduce the quantity of household waste per person by 7% within 5 years, in accordance with the objectives set by the public authorities.

The waste prevention measures led by Syctom, including its contribution to the Ademe budget through the TGAP tax, rose to €5.8 million in 2011, or a 14% increase compared to 2010.

Support for of Local Prevention Programmes (PLP)

90% of people in Syctom's sphere involved in prevention

Even though the regional target is to reach 80% of municipalities in the Paris region, Syctom would like to encourage 100% of its member municipalities to get involved in a local prevention programme. At the end of 2011, 31 of them (or 65 municipalities) had started this process, or 5.2 million people. The agency is planning to give a contribution to municipalities with fewer than 20,000 inhabitants which are not eligible to Ademe support (€10,000 for the first year, then grants on a pro-rata basis of the number of inhabitants in the following years).

Customised support

In addition to the support from Ademe and the Paris region, Syctom is financing the intervention of a specialised engineering company to help its member local authorities to implement their local prevention plan. The contribution is granted in the form of 6 half-days of intervention per year, per local prevention programme. It can be used all in one go or over several days, on one or several themes (drawing up the programme, putting in place control households, organising meetings, methodological support, etc.). It covers all the phases of a local prevention plan, from carrying out the diagnostic assessment to evaluating the programme. The support is adapted to the specific needs of each local authority and to the representatives, officials or technicians.

€20,000 for on-the-ground actions

Syctom has increased the contribution it grants to local waste prevention actions: it now covers up to 80% of the total cost of projects (instead of 20%) with a ceiling of €20,000 per year and per municipality (instead of €10,000). It can be granted to a member local authority or directly to project leaders such as: associations, public institutions, social landlords or teaching institutions. It is granted for any action aimed at raising awareness of reducing the quantity or harmfulness of waste. In 2011, 3 projects were funded in this way, presented by the agglomeration community Plaine Commune, the association Graine IDF and the town of Vitry-sur-Seine.



Kitchen and garden waste make up around 30% of our bins. According to Ademe, if households compost this waste, around 40kg of waste per person and per year can be avoided, thus keeping it out of the rubbish bin.

A home composting kit

Designed in the same vein as the “anti-waste kitchen” kit made in 2010, Syctom has designed a kit for raising awareness of home composting of organic waste. It contains an umbrella stand designed in the form of a residential with a garden and composter so as to attract the public’s attention, as well as the equipment needed to make compost, an educational brochure, a video about composting at the foot of the building and an organisational guide. It was handed out free of charge to some fifty member municipalities and associations during Sustainable Development Week 2011. These used the 2 kits many times in 2011, at city festivals and local festivals, associative forums, open days, at markets, in schools, etc. As such, they raised awareness amongst around 13,000 people.

50,000 composters in 2014

In order to help its member local authorities to develop home composting in their sphere, Syctom has provided them with equipment – for which they pay 10% of the price – and helps them to implement their composting programme. It has designed a set of awareness-raising tools, it organises training sessions led by a master composter and looks after the monitoring and the administrative and financial aspects of the operation. In 2011, it delivered 2,000

composters to 6 municipalities: Garches, Livry-Gargan, Rosny-sous-Bois, Saint-Cloud, Vaucresson, Vitry-sur-Seine. This operation is 80% subsidised by Ademe and the Paris region.

Partnership with Graine Île-de-France

In order to offer its member local authorities quality events around prevention, Syctom has formed a partnership with Graine Île-de-France. A regional group which organises events and provides information about nature and the environment, Graine is an associative network which brings together 90 structures on the ground. During the European Waste Reduction Week, it organised around ten personalised events in Paris and Clichy-la-Garenne, the majority of which used awareness-raising tools developed by Syctom (such as the anti-waste kitchen and the composting kit).

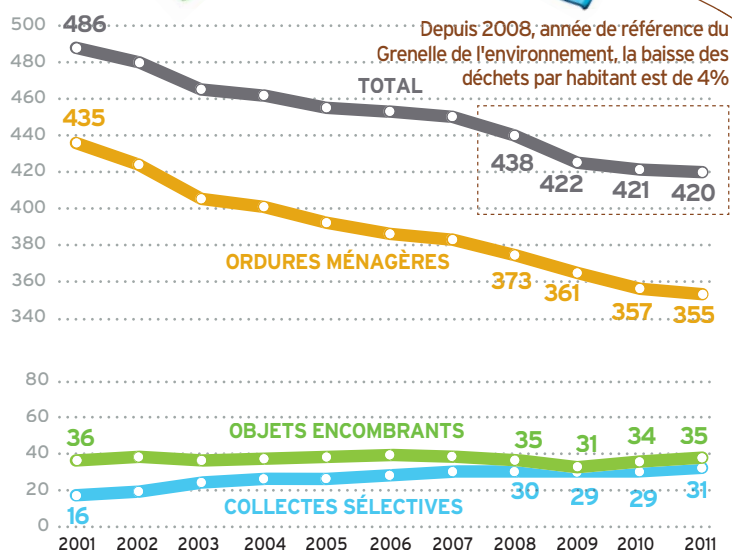
Organiser of events in its sphere

Coordinator of its sphere and an intermediary for the Paris region for waste prevention, Syctom has participated in various working groups in committees organised by the Regional Council on this theme. To this end, in 2011 it signed a financial partnership agreement with the region with financial support. It provided assistance to the steering

CHANGE IN WASTE PROCESSED PER PERSON* (2001-2011) IN KG/PERSON

Within 10 years, the household waste processed by Syctom has fallen by 66kg/person, or a reduction of 14%, despite a rise in population growth (+14% on a like-on-like basis). While household fell by 80kg/person, bulky objects have remained relatively stable (- 1kg/person) while selective collections increased by 15kg/person, i.e. an increase of 1.4kg/person on average annually. In 2011, the trends in household waste and selective collections observed over the last decade continued. Bulky objects posted annual growth of around 4% per person in 2011.

*Quantities processed by Syctom on a like-on-like basis (76 municipalities and 5.53 million people in 2011).





During the European Week for Waste Reduction, Syctom provided its member local authorities with 52 batches of 4 flags measuring 4 metres high to raise awareness among passers-by of the need to reduce the weight of our bins and point out the actions being carried out in the municipalities. A giant sign that can be used as and when needed.

committees for local prevention plans to which it was invited, supported by SITOM93 and SYELOM. Working with its institutional partners, it organised 2 local prevention seminars for its member local authorities with a view to presenting its support system in an exhaustive manner.

7,600 visitors: +37%

In 2011, the number of people who visited Syctom's installations increased by 37% compared to 2010. These meetings are special moments for raising awareness of waste prevention. They enable everybody to become aware of the volume and impact of waste production, as well as the importance of sorting at the source.

2,175 people visited the sorting centres at Nanterre, Sevran and Paris XV (for the first time in 2011), the incineration plants in Saint-Ouen and Ivry-Paris XIII and the multi-channel centre Isséane during their open days.

As part of visits scheduled throughout the year, 5,421 people visited Syctom's installations, whether information relays (sorting ambassadors, municipal technicians of waste departments, social landlords, caretakers, etc.) and school groups. In order to meet the ever-growing demand for visits and convey messages promoting waste reduction, a prevention ambassador has been recruited.

Reducing the harmfulness of waste

Better management of medical waste

Syctom has launched a study which aims to help its member local authorities to monitor their hazardous waste flows and raise awareness of its danger among the general public. An analysis of errors made during sorting at the source carried out in the Nanterre sorting centre highlighted the large increase in hazardous medical waste among packaging waste. This type of waste presents risks for agents and causes stoppages in the sorting chains. Syctom has carried out and provided the local authorities concerned with a report presenting the geographical zones showing the probable points of origin of this medical waste. This experiment will be expanded to all of Syctom's sorting centres in order to limit the presence of this waste in selective collections.

Developing reemployment

Co-funding of 3 inter-municipal waste reception centres

In 2011, Syctom extended the support it has lent for years to the creation of a network of community waste reception centres while linking it with the development of reemployment opportunities. The grant covers 15 or 20% of the total investment, depending on whether the waste reception centre is leading actions to raise awareness of reemployment or is integrating facilities specific to reemployment (with a ceiling limit of €500,000). It also includes a contribution to the purchase of property (€30 per m², with a ceiling limit of 3,500 m²). In 2011, Syctom granted €1.24 million to inter-municipal waste reception centres, to the benefit of the Plaine Commune agglomeration community (opening of the inter-municipal waste reception centre in Épinay-sur-Seine and closure of the one in Saint-Denis in June 2011.), Meudon and the agglomeration community of Versailles Grand Parc (Bois d'Arcy).

Support for resource centres

Syctom has decided to encourage the development of a network of resource and recycling centres on its sphere. It can finance 20% of investments (with a limit of €500,000) and reduce the operating costs of these installations by processing, free of charge, 15% of the non-reusable or non-recyclable waste entering their centres. In 2011, it supported the "2mains" resource centre in Blanc-Mesnil and examined the files of several project leaders in Paris. It also studied the feasibility of a partnership agreement with the Emmaüs Val-de-Marne community as regards the recovery of reusable objects brought to the waste reception centre in Ivry-Paris XIII.

A regional reemployment directory

Syctom has formed a working group to define, together with member local authorities, the Essonne département and the Paris region, the methods for creating a regional reemployment directory. The reemployment activities have already been categorised, providing a comprehensive overview of careers, as the directory must be created in 2012.

Promoting eco-design

The metropolitan agency's ambition is to help to raise the awareness among companies and the public of the advantages of responsible consumption in terms of reducing the weight of our bins.

Zero Waste Design student competition

Syctom called on the creativity of students in the Paris region in the area of eco-design in launching the Zero Waste Design competition 2012 in partnership with the Paris region. It invites the designers of tomorrow to design innovative and sustainable consumer goods and to imagine products not as future waste but as a future resource. Of the 25 projects presented, the best 5 will be awarded a prize and a brochure presenting the projects will be made.

A visitors' charter for companies

Syctom has invited the managing directors of several companies in the industry and distribution sectors to visit its selective collection sorting centres. Its objective is to begin a sustainable partnership with companies with a view to raising their awareness of the end-of-life of their products and to promote eco-design – reducing packaging and the harmfulness of products, the use of recyclable materials, etc. A visitors' charter of their facilities has been offered to them for this purpose, through which they can inform Syctom, within 18 months of their first visit, of the actions that they have or are planning to put into place to reduce the waste generated by their activities.

Setting a good example

In 2011, Syctom presented to its entire staff the results of the internal diagnostic assessment carried out the previous year on the exemplary nature of the metropolitan agency in terms of waste prevention. Working groups were formed, with voluntary advisory agents on 3 themes: composting, paper and eco-responsibility in the workplace. They are responsible for listing ideas and suggestions on these topics with a view to drawing up recommendations for good work practices.



MATERIALS RECOVERY

TERRITORIAL SOLIDARITY DRIVING PERFORMANCE

On signing the contract with Éco-Emballages for the period 2011-2016, based on recycling performance, Syctom's 84 local authorities spoke with one voice, showing metropolitan solidarity. In 2011, grants given by eco-organisations on Syctom's sphere rose to €29.2 million, or a collective gain of 19% compared to 2010 (bareme D).

Syctom has also continued to increase its capacities in terms of materials recovery, with the construction of Paris' first sorting centre in the 15th arrondissement. It considerably strengthened its contribution to selective collections, which rose to €26.9 million (+29% compared to 2010). It optimised and strengthened its characterisation measures at the entrance of sorting centres with a view to improving the quality of collections. In addition, it strengthened its actions to increase awareness about sorting.

In 2011, tonnage entering sorting, pre-sorting and waste reception centres increased by around 2%. The recyclable materials extracted from this waste increased by 4% to reach 221,889 tonnes.

In total, waste which was subject to materials recovery, including glass, accounts for 691,462 tonnes, or 27% of the tonnage processed in Syctom's sphere.

Developing of sorting capacities

First sorting centre opens in Paris

Commissioned in 2011, the sorting centre in Paris XV is the first of Paris' sorting centres built by Syctom to rebalance and redistribute its facilities between the capital and its suburbs. Every year, it processes 15,000 tonnes of waste – packaging, papers and newspapers sorted at the source by over 350,000 Parisians – mainly in the 14th and 15th arrondissements, but also in the 5th, 6th and 7th. It is the first of Syctom's sites to be a recognised "Experimental operation with HQE approach and industrial buildings", the HQE certification having previously been reserved for tertiary buildings only.

Alongside the Isséane and Nanterre plants, it is part of a network of sorting centres in the west of the greater Paris area, serving the inhabitants of the urban area. Operated by Coved (SAUR group), it is run by a team of around 50 people, including 24 sorting agents. Syctom has demanded that priority be given to secure work contracts with support for contracts of indefinite duration.



Built using recyclable materials, the sorting centre in Paris XV is a low-consumption building with a planted roof. It features solar sensors which will be used to provide half of the sanitary hot water, and photovoltaic cells which will produce 25,000 kWh electricity per year, or the equivalent of the annual electricity needs of 4 families of 4. It is connected to the urban heating network. Rainwater is collected and, in the event of a storm, is drained into the sewage system in a controlled process.

Towards a sorting centre in the 17th arrondissement

Syctom is preparing to open a sorting centre in the 17th arrondissement in Paris. Built on a 13,500m² area of land belonging to the city of Paris, this facility will be designed to sort 30,000 tonnes of waste from selective collections per year. From a central vacuum unit with pneumatic collection, the waste sorted by inhabitants in the area will arrive in the sorting centre at a rate of 500 tonnes per year. It's a first in Paris. The site will also house waste from packaging collected by nearby municipalities, which will help to restore regional balance in Syctom's processing installations. Syctom will take account of the specifications and the calendar for completing the new rail logistics platform as soon as they are defined. The provisional budget for the operation is €46 million excl. tax.

Overhaul of the sorting centre in Nanterre

In accordance with the operating contract, the Syctom sorting centre in Nanterre is to be the subject of continued improvement investments, particularly with a view to ensuring greater automation of facilities. The working conditions of agents, whose responsibilities will evolve towards control functions, will be improved and production capacity will be increased to 36,000 tonnes. In 2011, a commitment was undertaken to sign a partnership contract with the Committee for light aluminium and steel packaging (CELAA) for the recovery of small aluminium packaging. This overhaul has reduced processing costs to €184/t compared to €187/t in 2010.

HIGH ENVIRONMENTAL QUALITY

The industrial premises with which Syctom is equipping itself are designed following High Environmental Quality (HQE) criteria.

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, olfactory).

In order to conserve natural resources, recyclable materials are favoured for 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).

A new basis for selective collections

Renewal of contracts for the recovery of materials

Following a competitive tendering process, Syctom designated new industrial partners for the recycling of household packaging materials entering the framework of the grants allocated by Eco-Emballages. All contracts include ceiling prices which protect budgetary balances in the event of a sharp fall in raw material prices. They also include community recycling clauses and calculated objectives for the use of river transport. The vast majority of contracts were concluded at more favourable economic conditions than the previous ones relating to bareme D. According to a simulation based on the rates observed from 2007 to 2011, the gain for Syctom would be around €1.5 million/year. Combined with optimised recovery conditions, the continued rise in prices was reflected in 2011 by a €7.3 million increase in income from the sale of materials from Syctom's sorting centres and incineration units, totalling €64.9 million.



PARTICIPATING IN THE SORTING OF ALL WASTE PLASTIC PACKAGING

The Sevran centre was chosen as a pilot site as part of the national experiment on the extension of the recommendations for sorting plastic household packaging launched by Ademe and Eco-Emballages among a sample of 4.1 million inhabitants. Placing all waste plastic packaging, regardless of type - containers, pots, films, empty plastic bags, etc. - into the same box would make the task of households easier, would be pertinent from an environmental perspective and would help reduce the rate of recycling household waste (75%) set by the Grenelle environmental objectives. For this purpose, the Syctom centre located in Seine-Saint-Denis will process household packaging waste sorted by around 390,000 people in the 10 municipalities in its catchment area, Aulnay-sous-Bois, Clichy-sous-Bois, Coubron, Le Raincy, Livry-Gargan, SEAPFA (Le Blanc-Mesnil, Sevran, Tremblay-en-France, Villepinte) Vaujours and in the 3rd arrondissement in Paris. In 2011, Syctom worked with the latter municipalities to prepare the launch of this operation. The experiment, which started on 1 March 2012, provides an opportunity to relaunch selective collection on a territory with high development potential.

RECYCLING: IT'S EVERYONE'S BUSINESS

Household waste is a mine of resources: It contains materials - paper, plastics, metals, etc. - which can be reintroduced in a production cycle. Recycling household waste has the advantage of reducing the quantity of waste incinerated or sent to landfill and of preserving natural resources: it saves raw materials, prevents the environmental impact of mineral extraction and generally saves water and energy in production processes. It also creates new activities.

The Environment Grenelle has set the objective of recycling 75% of packaging in 2012 and the Paris region has set a ratio for the selective collection of newspapers, papers and packaging of 47.6kg/person by 2019. These ambitious targets require the active commitment of all players in the waste chain: the quantity of materials recycled depends on the recyclability of packaging and the quality of sorting at the source; downstream, it depends on the processing capacity of sorting centres, the efficiency of their processes, and the market demand for recycling.

FINANCIAL OBLIGATION WRITTEN INTO THE GRENELLE LAW

Article 46 of law no. 2009-967 of 3 August 2009 on the schedule for the implementation of the Environment Grenelle forecasts, in the particular case of packaging, that the costs of collecting, sorting and processing should be 80% of reference net reference costs of an optimised collection and sorting service.

Eco-Emballages must thus play an active role in reaching the national recycling objective of 75% of household packaging waste from 2012. It must bear 80% of these costs, along with other holders of an accreditation for household packaging.

A new contract with Eco-Emballages

Syctom has renewed its partnership with Eco-Emballages, signing a new contract for the next 6 years. It defines the means for contributing to the collection and sorting of household packaging waste in accordance with the bareme E scheme, approved by the State. It is based on the recycling performance, awareness-raising of players and the simplification of the support scheme in order to meet the

objectives set by the Environment Grenelle. From now on, over 80% of Eco-Emballages grants are allocated based on the quantities of packaging waste sent to recycling channels.

A single contract was signed by Syctom on behalf of its 84 member local authorities, in collaboration with them and the primary syndicates. As part of this contract, the metropolitan agency has freed its member local authorities of administrative tasks relating to the monitoring of flows and information management and the request for grants from Eco-Emballages.

In order to encourage its member local authorities to carry out targeted actions to improve sorting performance, Syctom has developed a support and financial incentive scheme.

Technical and financial support

A new tool for local authorities to analyse selective collections

To increase the rate of recycling packaging and paper waste, in 2011 Syctom launched a new programme of actions to assess the composition

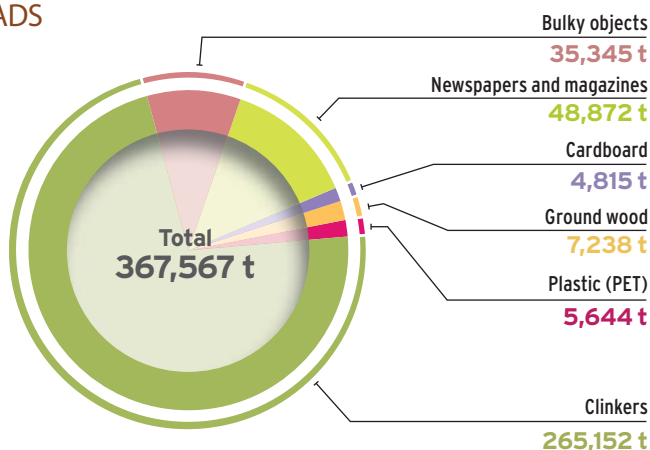
of collections coming into sorting centres in a more precise and frequent manner. As part of this programme, 800 characterisations were carried out in 2011, thus creating a representative snapshot of recyclable materials, local authority by local authority. These data help municipalities to identify, if necessary, the ways in which they can improve the quality of sorting (indicating error rates of 30% following the control procedure, sending results every quarter). They are also essential for obtaining support for the bareme E scheme: From now on, Eco-Emballages will be based on the tonnage of materials sorted and recycled, and no longer on the amount of packaging collected, in order to cover the collection and processing costs borne by local authorities.

Syctom's increased support for the development of selective collections

Syctom has continued to provide the support that it traditionally lends all of its member local authorities, at a rate of €125.89 per tonne of selective collections entering its sorting centres, or a total of €21.9 million in 2011.

In addition, it increased its support for selective collections by harmonising sorting efficiency at metropolitan level and restore the balance of local finances during the period of introducing the bareme E scheme. Increased to €500,000 per year, the overall budget for measures carried out to increase the quantity and quality of selective collections in the high-potential municipalities of its territory was doubled.

BREAKDOWN OF RIVER TRANSPORT BY MATERIAL: 15,350 FEWER LORRIES ON THE ROADS



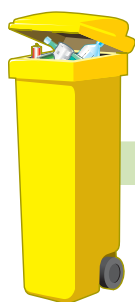
In 2011, the use of alternative transport increased from 2010, amounting to around 370,000 tonnes, or 8,000 extra tonnes, which represents around 15,350 fewer lorries on the roads. Whereas 10 years ago, only clinkers were concerned, recyclable materials today make up around 30% of the recoverable material evacuated by waterway.

2011 was marked by the increase in the transfer of clinkers by waterways to Isséane with a waterway transport rate having increased from 52.8% to 81.7% and the operational launch of river transport for cardboard from selective collections.

A financial incentive scheme to improve sorting quality, based on incentive remuneration per tonne of recoverable waste entering sorting centres, has been introduced. Finally, for glass recycling, Syctom grants additional support for

the deployment of sorting ambassadors, and compensated the reduced support given by Eco-Emballages. In total, the amount of Syctom's contribution to selective collections rose to €26.9 million in 2011 (+29%).

BREAKDOWN OF MATERIALS FROM SELECTIVE COLLECTION BINS



A SECOND LIFE

FOR RECYCLABLE MATERIALS

- Around **50kg of recycled steel** can make **1 supermarket trolley**.
- Around **2kg of aluminium** can make **1 scooter**.
- With **4 food cartons (40g)**, you can make **1 roll of toilet paper**.
- With **3 cereal boxes (242g)** in cardboard you can make **1 shoebox**.
- With **100kg recycled** you can print more than **550 newspapers**.
- With **12 recycled drinks bottles**, you can make **1 pillowcase**.
- With **67 water bottles** you can make **1 double quilt**.
- With **11 milk bottles** you can make **1 watering can**.

Newspapers
magazines

35.58%

Sorting rejects

30.56%

Cardboard packaging
(including food cartons)

18.98%

Other papers
and cardboard

9.90%

Plastic packaging

5.28%

Steel and
aluminium tins

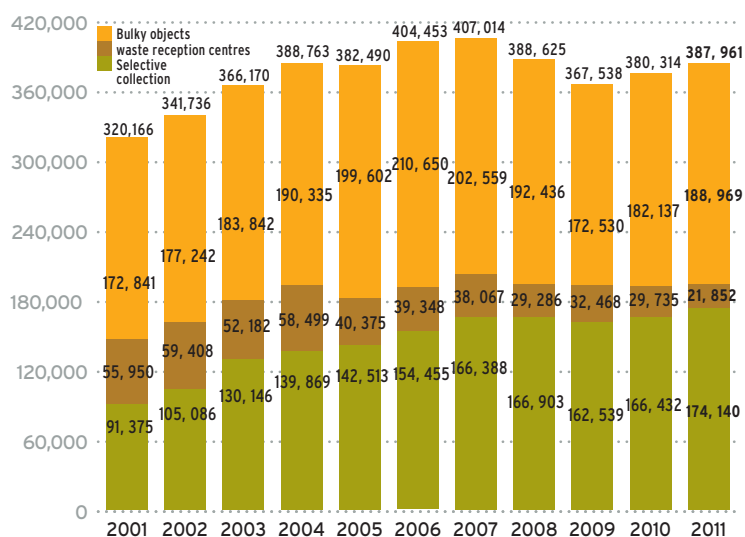
1.44%

Small electrical
appliances

0.17%

CHANGE IN COLLECTIONS SENT FOR MATERIALS RECOVERY

in tonnes

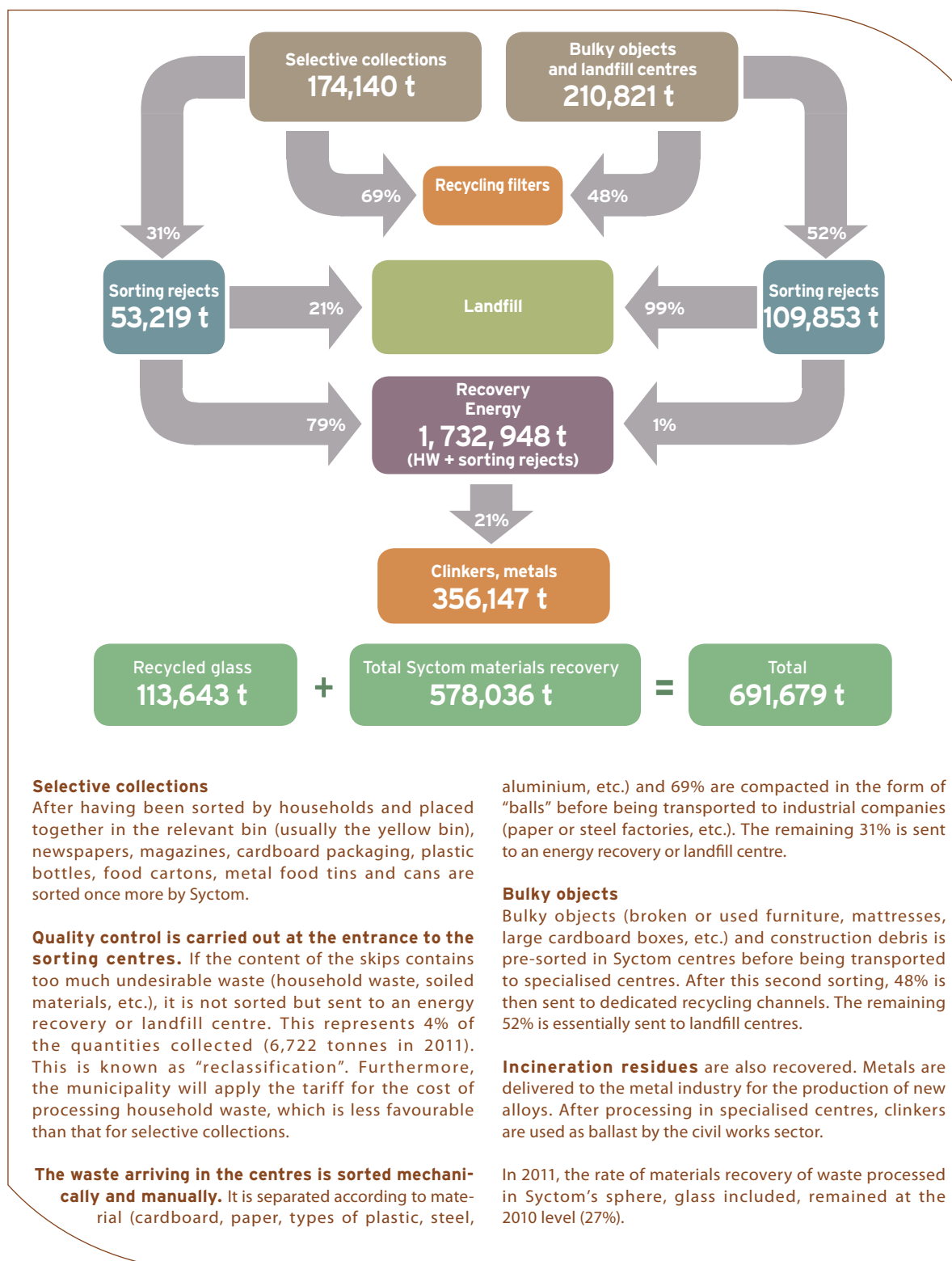


Within 10 years, the volume of waste entering selective collection centres, bulky objects pre-sorting centres and waste reception centres in Syctom's sphere grew by 13%.

Reinvigorated in 2010 after the economic crises, tonnage received continued to increase in 2011. The total volume of recoverable material experienced growth of 2%. Amounting to over 174,000, selective collections (+5% compared to 2010) exceeded their highest level, reached in 2007-2008, as did the recoverable proportion (121,000 tonnes). Bulky objects increased by 4%, mainly due to the presence of construction debris.

The quantity of waste deposited in Syctom's waste reception centres fell by 27% due to the closure of the centre in Saint-Denis at the end of June 2011. In parallel, Syctom is supporting the extension of the network of municipal waste reception centres.

MATERIALS RECOVERY CHANNELS



RECOVERY OF ENERGY AND ORGANIC MATTER

ADVANCES IN

URBAN ECOLOGY

In accordance with European guidelines and the Grenelle laws, Syctom has adopted a strategy of recycling waste according to its composition in order to use all resources to full advantage and reduce the proportion reserved for incineration.

As the amount of biodegradable matter in residual household waste (food and garden waste, paper, cardboard and sanitary textiles) is around 55%, Syctom has decided to promote organic recovery in its investment programme. With 3 centre projects dedicated fully or partially to the recovery of organic waste, Syctom is planning to develop a channel for the ecological processing of organic waste – that found in household waste or sorted at the source – while producing local renewable energy.

As for incineration, it produces local energy with controlled effects on health (see InVS study – February 2009). Using little space, the combustion of waste is particularly interesting 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 18%, are recovered.

In 2010, Syctom continued its consultation approach and adopted the definitive programme for transforming the Ivry-Paris XIII centre into a centre for recovery of organic matter and energy. In authorising the injection of biomethane from waste into natural gas grids, the State also demonstrated its support for the methanisation channel in 2011. Overall, 1,732,948 tonnes of waste were recovered as energy, which accounts for 55%⁽¹⁾ of tonnage processed by Syctom.

(1) after deducting incineration residues subject to materials recovery (355,930 tonnes of clinkers and metals), accounted for as materials recovery.

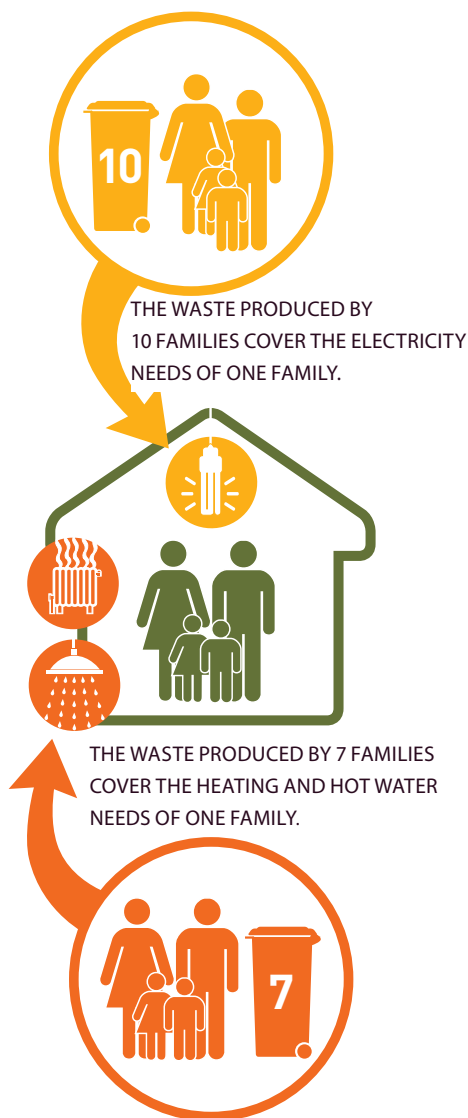


SYCTOM'S WASTE: A SOURCE OF ALTERNATIVE ENERGY

1,732,948 tonnes of incinerated household waste

- ° heating and hot water for 320,000 homes⁽²⁾
- ° consumption of 320,000 equivalent tonnes of oil prevented, i.e. 6,400 collective heaters with gas or fuel oil;

⁽²⁾ Model home of 80m² occupied by 4 persons in a collective building built between 1995 and 2000. Taking into account the 2005 energy review of the HWIUs, as published in PREDMA, i.e. 8 MWh/year per housing equivalent



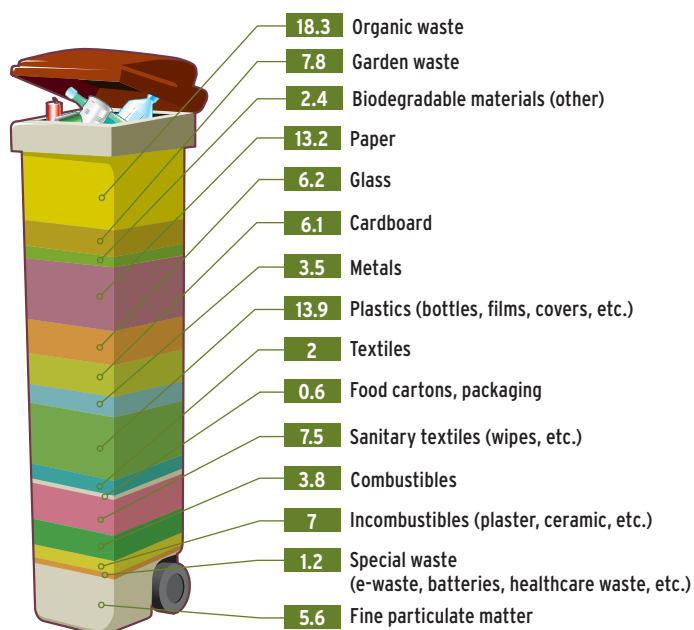
The incineration of household waste is recognised by the 2008 Waste Directive as a recovery operation if it reaches a high energy yield; the Grenelle law recognised its place as a method of waste processing and energy production.

It saves natural resources, as household waste is used instead of fossil fuels to feed urban electric or heating networks. It avoids generating greenhouse gas emissions: for the same energy value produced, the quantities of fossil CO₂ emitted by incinerated household waste are respectively, 55% and 40% lower than those emitted by coal and fuel oil

(source: Amorce)

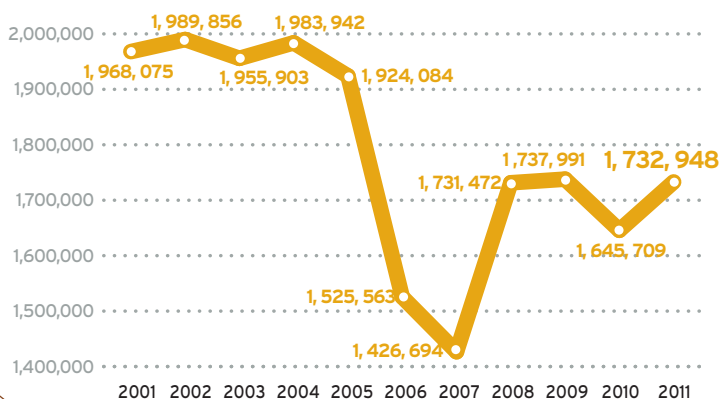
BREAKDOWN OF A RESIDUAL HOUSEHOLD WASTE BIN IN %

Despite the efforts made by the population to sort their waste, more than a third of all waste thrown into the main rubbish bin is of use (35.3%). Some of it could have been placed in glass recycling bins, selective collection bins (papers, food cartons, plastic bottles, etc.), while some could have been brought to a voluntary drop-off point (clothing, syringes, etc.) or brought to a shop (batteries, small electrical appliances, low consumption bulbs, etc.). This situation has led Syctom to continue its communication campaigns with a view to promoting better compliance with sorting recommendations. The amount of organic household waste (food and garden waste, paper, cardboard and sanitary textiles) totals 54.4% in 2011.



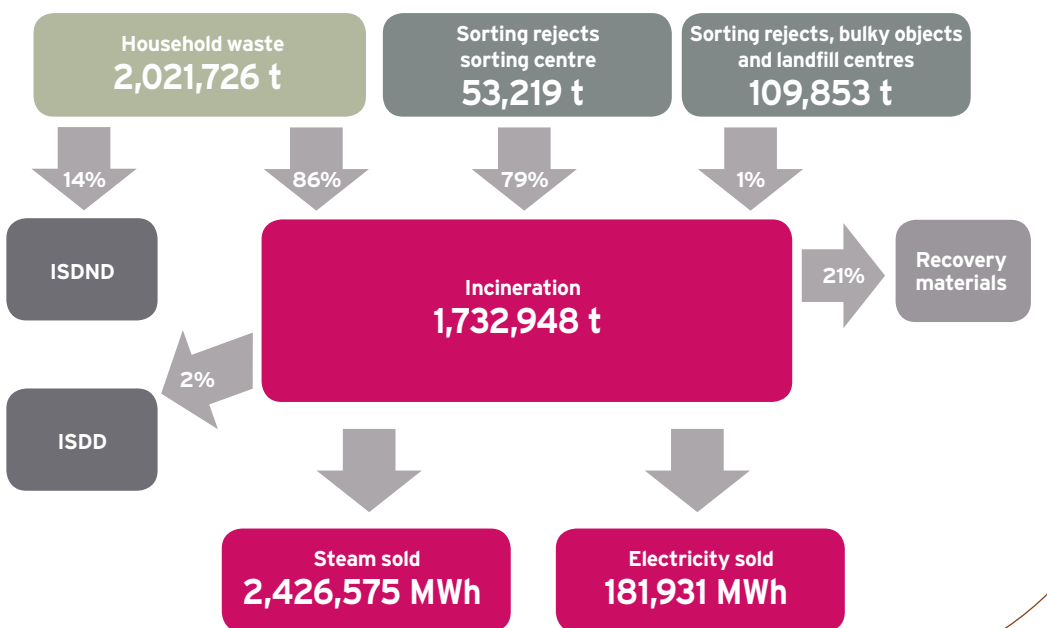
CHANGE IN INCINERATED WASTE (2001-2011) in tonnes

In 2011, tonnage of incinerated waste went back to its 2009 level (halts in production in Ivry-Paris XIII and Saint-Ouen had resulted it to drop in 2010). In 10 years, the quantity of incinerated waste fell by 235,127 tonnes (down 12%).



ENERGY RECOVERY CHANNELS

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 heat water in the equivalent of 320,000 homes. The electricity produced is partly used to operate the sites and partly sold to EDF. The sale of steam and electricity reached €45,776,557 million in 2011.



In total, 72% of waste received by Syctom was incinerated.

The Ivry-Paris XIII project in operational phase

Approval of the transformation programme

After a consultation phase begun in 2003 and strengthened in 2009 with a public debate and continued within the partners' committee under the aegis of a guarantor, the programme for the transformation of the Ivry-Paris XIII centre was approved by Syctom's syndicate committee in 2011. The future centre at Ivry-Paris XIII will include a unit for the mechanical sorting of household waste, methanisation facilities and an incineration unit. The fermentable fraction of household waste and organic waste will be methanised with a view to producing biogas and a standardised compost. The provisional budget for the operation is €860 million excl. tax.

Enrichment of the initial project

The debate deepened with stakeholders led to the provisional development of the different waste deposits to be more closely determined, an agree-

PROVISIONAL PLANNING OF THE TRANSFORMATION OF THE IVRY-PARIS XIII CENTRE

2011-2013: competitive dialogue procedure

2014: filing for planning permission and administrative permission to operate

2015: public enquiry and beginning of the works

2019: commissioning of the new energy recovery facility

2023: commissioning of the organic and energy recovery centre

ment on the programme for the integration of the centre into the urban landscape and architecture to be reached and the provision of the selective collection of organic waste to be taken into account. In addition, the project will benefit from a high quality artistic and cultural approach at the request of the Mayor of Ivry-sur-Seine.

Reduction of waste

The project respects the hierarchy of the approaches to waste processing defined by public



INTEGRATION INTO THE URBAN FABRIC OF SAINT-OUEN

Having set up in the eco-district of the Docks, Syctom's waste energy recovery centre in Saint-Ouen will move from an industrial setting to an urban setting. Syctom and the city have jointly defined the means of integrating the future central vacuum unit of the pneumatic collection network at the Docks into Syctom's centre. To this end, Syctom has launched a programme of studies to have the centre evolve in harmony with the urban project. The studies relate to the integration of the facility into the landscape and architecture of the area and how to limit the impact of traffic relating to its activities.

A contract for assistance was awarded to APOR with a view to defining, in collaboration with the town of Saint-Ouen and the developer of the Docks, the programme for the integration of the facility into the architecture of the area, which will form the basis of a competition. The study on traffic is currently in progress. It aims to draw up an assessment of the ingoing and outgoing flows and to evaluate the potential for the development of alternative transport and define a flow diagram for collection skips in the area. In addition, the technical studies carried out by Syctom to renovate the system for treating residual water from the energy recover unit in Saint-Ouen were completed in 2011. They aim to reach the pollution cleanup standard required by future regulations. A public order procedure will be launched soon for the completion of the works.

authorities and is in line with the strategy that Syctom has been following for several years now: giving priority to prevention and organic recycling, following a community logic, maintaining a continuity of public service, environmental protection and controlling costs. In addition, it complies with the principle of reversibility. It plans, firstly, to reduce the global capacities of the site by 20% and to reduce incineration capacities by 50%. The facilities are sized in line with the needs of the Ivry-Paris XIII catchment area and the network management of Syctom's installations.

A competitive dialogue

A competitive dialogue procedure was opened as part of a public tendering process to choose the partner who will be responsible for the design, construction and operation of the future centre for organic and energy recovery from household waste. Two candidates will take part in the dialogue, which will last 2 years.

Environmental quality guidelines

Environmental quality guidelines have been drawn up in consultation with the town of Ivry-sur-Seine, the town hall of the 13th arrondissement in Paris and the committee of partners of the

EXTENSION WORKS

Syctom has continued its programme of works, started in 2009, on the facilities of the current household waste incineration plant in Ivry-Paris XIII in order to extend its operation in optimal and reliable safety conditions and with controlled costs until the new plant is commissioned, which is due to take place in a phased manner between 2019 and 2023. In 2011, the total cost of these works reached €26 million incl. tax.

coordination. It determines the means to be implemented and the criteria to be followed to protect the environment and living conditions of residents living near the Ivry-Paris XIII centre. It concerns the current worksite, the building site and the operation of the future facility. A committee for monitoring the environmental quality guidelines will ensure that they are followed.

Watchmen

At Syctom's request, the town halls of Ivry-sur-Seine and the 13th arrondissement of Paris launched a call for applicants to make up a group of watchmen around the Ivry-Paris XIII centre. Following the example of the organisation put in place in Issy-les-Moulineaux for the construction and operation of the Isséane centre, a group of constant observers will be set up, with local volunteers, to monitor the operation of the current centre and its transformation into a centre for the organic and energy recovery of waste.



CONTROLLING ATMOSPHERIC EMISSIONS

The atmospheric emissions of Syctom's incineration units with energy recovery are controlled both by the operator (self-monitoring) and by external laboratories; these controls are not only regulatory but form part of Syctom's quality control process.

Analysing waste

Throughout the year, the operator controls the pollutant content in the smoke in the chimneys. It carries out real-time analysis of the particles, nitrogen oxides, hydrochloric acid, sulphur dioxide, carbon monoxides and organic carbons (TOC); it continuously takes samples of the dioxins and furans which it then sends for analysis to an external laboratory once a month. The analysis data is sent regularly, every month or quarter depending on the authorisation of usage, to the regional and interdepartmental department for the environment and energy. The DRIEE can also carry out spot checks on site.

Twice a year for Ivry-Paris XIII and Saint-Ouen and four times a year for Isséane, the operator must call on a State-approved laboratory to analyse the pollutants listed in the regulation (continuously controlled pollutants, dioxins-furans, heavy metals and hydrofluoric acid).

Also twice a year, in addition to the two regulatory checks, Syctom calls on a State-approved laboratory to analyse the pollutants listed in the regulation.

As well as being sent to the DRIEE, all of this data is communicated to the reception 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 the website www.Syctom-paris.fr.

Monitoring fallout

The environmental impact on the atmospheric emissions of dioxins/furans and heavy

metals is also the subject of a **regulatory monitoring programme**. Owen-type gauges – which collect rainwater – are installed twice a year at places where plumes of smoke fall-out are supposed to be the greatest and on key points to measure the degree of pollution near the incineration units. The positioning of the gauges was determined using a mathematic model. This programme follows the method recommended by INERIS*.

In parallel to this regulatory monitoring, Syctom carries out **one-off bio-monitoring campaigns** to improve knowledge of the health and environmental impact of its installations. External laboratories measure the impregnation of dioxins/furans and heavy metals in moss and lichen removed from their environment. Costing €47,000 annually, this monitoring programme aims in particular to reinforce the monitoring conducted by gauges.

No specific impact of Syctom's incineration units has been brought to light on these three sites through these campaigns.

*National Institute for Industrial Environment and Risks

Methanisation: a method of processing adapted to the nature of the waste

Concerned with following a community logic and a restrictive and changing legal framework for the reduction, incineration and landfill, Syctom launched a debate at the beginning of the 2000s on the introduction of biological processing unit for household waste. In this regard, methanisation has emerged as the sole alternative means of reaching these objectives. To this end, the methanisation unit at Romainville/Bobigny is a major part of Syctom's strategy. It is driven by territorial solidarity and responsibility in the face of local production of household waste.

SUPPORT FOR THE METHANISATION CHANNEL AND PROJECT IN ROMAINVILLE

Syctom has welcomed the reinforcement of national support for methanisation. In 2011, after authorising the injection of biomethane produced from waste in natural gas grids, the State set a guaranteed purchase rate in order to speed up the channel's development both for the injection in the natural gas grid and the sale of electricity. The aim is to help ensure that by 2020, 23% of energy consumed in France is of renewable origin. Methanisation is fully recognised in France as an ecological solution for processing organic waste and as a production channel for green energy. Functioning according to a community-based approach in adapting to local needs in accordance with the Environment Grenelle and regional energy and climate plans.

Ademe, who granted a €10 million subsidy to the Romainville project, believes that it will enable landfill in the Paris region to be reduced by a third and, by using river transport, it means 13,000 fewer lorries per year will be on the roads. The Paris region has also recognised the legitimacy of this operation, granting it a subsidy of €10.7 million.

A STUDY ON THE COLLECTION OF ORGANIC WASTE

A study was carried out in partnership with SEAPFA, Aulnay-sous-Bois, Ademe and the Paris region to assess the technical and financial feasibility conditions of collecting organic waste from households and other economic players (food industries, catering, hypermarkets, markets, etc.) to the catchment area of the future centre at Blanc-Mesnil/Aulnay-sous-Bois. Entrusted to Inddigo, a consultancy and engineering firm specialised in sustainable development, it confirms the hypotheses of the diagnostic test carried out by Syctom in 2009-2010 on the production and management of organic waste on its sphere. It established 7 scenarios as a basis for reflection for local authorities. It highlights several elements which favour the introduction of a selective collection of organic waste: nearness to the processing site, the high frequency of current collections – which enable the introduction of an organic waste collection in substitution – and the density of economic activities in the sphere, which maximises the accessible deposit and at a controlled cost.



Syctom's projects

Project in Romainville/Bobigny: furthering the dialogue

In 2011, the administrative authorisation to operate the future centre in Romainville – which is made up of a sorting-methanisation unit of residual household waste, a selective collection sorting unit, a pre-sorting of bulky objects unit and a river platform on the Ourcq canal – was delivered by the State. The digging of a tunnel underneath the RN3 to link the latter to the processing site was completed and a call to tender was launched for the soil pollution cleanup.

Nevertheless, aware that the public enquiry procedure that took place in 2010 was not sufficient in clarifying the real challenges of the project, Syctom organised a public meeting, held at the start of 2012, under the aegis of the agglomeration community Est-Ensemble. Important commitments have been taken to bring all the guarantees that the inhabitants of Seine-Saint-Denis in question are entitled to expect: the opening of a space for information and exchange, the introduction of a co-operative process under the aegis of a guarantor, the carrying out of a technical audit with a view to checking that there are no noise disturbances and that the planned centre can operate in total safety and to drawing up a report on the quality of compost produced by the mechanical-biological sorting of household waste, as well as organising public hearings and meetings on waste management.

Project at Blanc-Mesnil/Aulnay-sous-Bois: launch of a competitive dialogue

A competitive dialogue for the construction and operation of a methanisation unit in Blanc-Mesnil/Aulnay-sous-Bois was launched in 2011. Five groups were selected following a tendering procedure to present their proposals within this framework. Financed in equal shares with the Wastewater Authority for the Paris Area (SIAAP), at an amount estimated at €64.5 million net excl. tax, the planned centre is due to co-methanise silt from the future wastewater treatment plant Seine-Morée (10,000 tonnes/year) with organic waste collected from large producers (5,000 tonnes/year) and by that collected by municipalities from the catchment area from their inhabitants. The project is of an evolving nature to take account of increase in organic waste tonnage collected. Out of the 5 municipalities concerned by this project, 4 have a residential housing rate equal or greater than 50% and have had a door-to-door green waste collection for several years now. These characteristics make these municipalities a suitable sphere for at-the-source sorting and, consequently, a potentially separate collection. It includes the provisions of Grenelle 2 and meets the regional objective of recovering 26.2kg organic waste per person by 2019. It is expected to come into effect in 2017.

The installation will also accept household waste and sorting rejects, and will then package them into balls with a view to transferring them by railway to processing units with energy recovery. Its capacity will be 85,000 tonnes/year.

ABOUT CHANGES TO THE NORM ON THE QUALITY OF COMPOST

At European level, a debate has been launched on the status of composts, which seeks to distinguish compost sourced from selectively collected organic waste from that for which the organic fraction is collected in a mix with residual household waste (HW). This development would seem to indicate that only compost sourced from selectively collected organic waste would be marketable.

France currently supports a results-based policy as opposed to a means policy as supported by other countries, in so far as good results can be achieved on compost sourced from residual household waste, without necessarily collecting organic waste separately. The end composition of the compost (in fertilising elements and polluting or undesirable elements) must ultimately determine the possibility for this compost to leave the status of waste, and not the way in which the waste was collected.

LANDFILL

LANDFILL AS A LAST RESORT

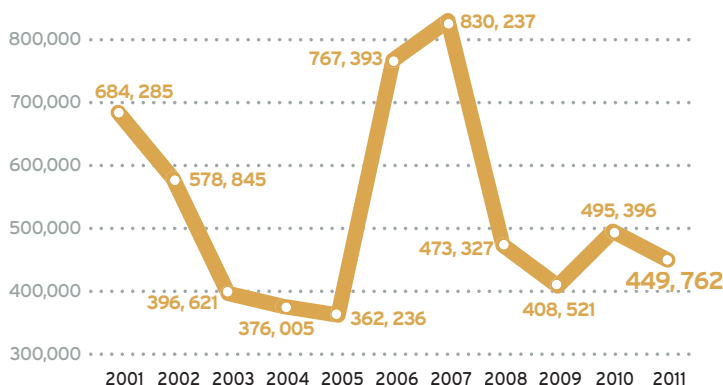
In accordance with the hierarchy of processing methods set by the 2008 waste directive and in respect of a community logic, Syctom only uses landfill as a last resort: waste which it cannot recover due to insufficient capacities and residual waste, i.e. that for which there are currently no viable recovery solutions in technical, economic or environmental terms. Belonging to this category are smoke scrubbing residues from incineration (REFIOM) and waste whose recyclable material has already been extracted (mainly sorting rejects from bulky object collections).

Exercising its public service mission in a very dense urban zone, Syctom does not have any landfill installations for hazardous or non-hazardous waste (ISDD or

ISDND). It uses private sites outside its scope of intervention and which, certified in accordance with ISO 14 001, present guarantees in terms of controlling environmental risks.

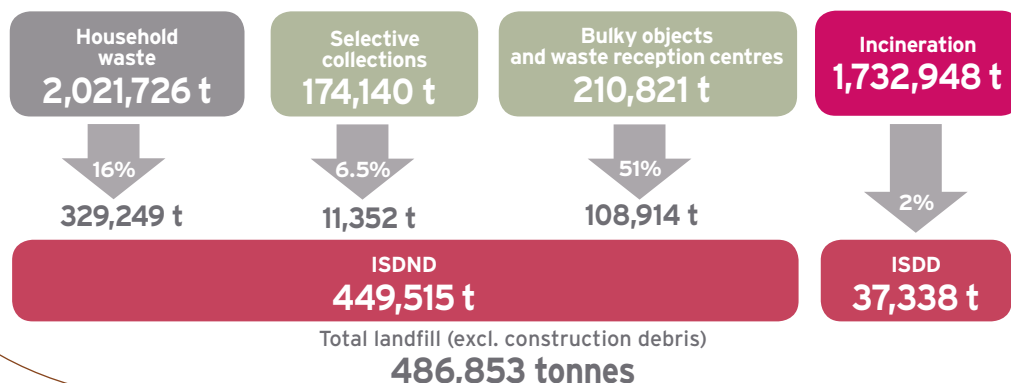
In 2011, the quantity of waste buried in ISDND decreased by 9%, amounting to 449,762 tonnes. It makes up almost 19% of waste processed by Syctom.

CHANGE IN WASTE STORED IN ISDND
in tonnes



LANDFILL CHANNELS

Residual household waste and sorting rejects, which cannot be recovered into energy due to lack of capacity, are stored in the ISDND, reserved for non-hazardous waste. These installations meet strict regulations in terms of the waterproofness of the sub-soil, the recovery of biogas and leachates, the drainage of rainwater and the monitoring of the quality of the water table. 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 hazardous waste. They are stocked in waterproof cells which are filed to ensure their traceability. Furthermore, 29,013 tonnes of construction debris were deposited in landfill centres reserved for inert waste.



Overall, 20% of waste received by Syctom is buried in ISDND and ISDD.

3.





+15%
increase in sales of
products (materials
and energy)

75%
Percentage of
fees in operating
income

**€21.9
million**
Amount of Syctom's
contribution to
selective collection

2%
Payroll as a
percentage
of operating
expenditure

**€-28.6
million €**
debt reduction

Technical and financial report

GUARANTEEING FINANCIAL SECURITY

Thanks to continued control of expenditure, the increase in fees was limited to 2% (including the TGAP tax), thus reducing the burden on local taxes. Overall, it amounts to €287.3 million.

Totalling €42.2 million, equipment expenses fell by half following the completion of the sorting centre in the 15th arrondissement of Paris and the continuation of the major extension works on the incineration unit in Ivry-Paris XIII in 2010.

Combined with rigorous management, the increase in income from the sale of recyclable materials and energy and the increase in support from eco-organisations relating to bareme E as well as a break from investment enabled Syctom to continue its debt reduction and increase its self-financing level for the third consecutive year.

With a net operating profit of €41.5 million, Syctom has consolidated its investment capacities with a view to the transformation of the Ivry-Paris XIII centre and methanisation projects in Seine-Saint-Denis.

Stabilisation of fees

In 2011, fees amounted to €7.06 per person (compared to €6.92 in 2010, an increase of 2%), and €101.72 per tonne deposited (compared to €99.73 in 2010, a 2% increase). with the contribution of each municipality calculated pro rata to its population and the quantity of waste it provides to Syctom.

Income from fees in 2008 amounted to €287.3 million in 2011, compared to €272.8 million in 2010, (+14.5 million euros) taking account of the strong increase in selective collections and bulky objects and taking into account the tonnage processed by SIGIDURS (40,000 tonnes).

The income from fees represented 75% of Syctom's operating income (82% in 2010). Its share in operating income fell slightly taking account of the large increase in sales of products and support from eco-organisations (with the establishment of the bareme E scheme).

Sale of products: +15%

Amounting to €66.6 million (compared to €57.6 million in 2010), the sale of products strongly increased by the combined effect of the global increase in raw material prices, the improvement of technical efficiency of the processing units and new operating clauses for the Ivry-Paris XIII centre.

The renewal of contracts to operate the incineration unit (effective from 1 February 2011) and the sorting centre at Ivry-Paris XIII following a competitive tendering process was accompanied by a change in the way operators were remunerated. Syctom now receives the income from the sale of products and energy pays all contractual operat-

ing costs, rather than covering only difference between income and expenditure. This system has thus arithmetically inflated the figures for income and expenditure compared to 2010, independently of the actual changes in tonnage and the production of materials and energy.

As a result, sale of steam and electricity by Syctom increased by €2.4 million in 2011 (+6%), amounting to €45.8 million.

Income from the sale of recyclable materials from the sorting and incineration of waste increased by €6.8 million (+34%), amounting to €20.8 million.

Support for eco-organisations: +18%

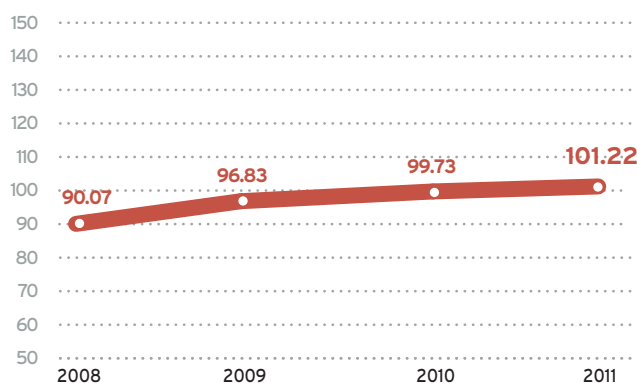
Support for eco-organisations, principally Éco-Emballages and Éco Folio, rose from €24.6 million in 2010 to €29.2 million in 2011 due to the establishment of the new Éco-Emballages scheme (bareme E) which places recycling of household packaging at the heart of its support system. Bareme E was translated into a financial gain of €3.9 million for Syctom, almost all of which was transferred to member local authorities. In addition, ÉcoFolio raised its rate of support of recycling newspapers and magazines from 22 to 50%.

Operating expenditure: 58% of expenditure Operating

In 2011, operating expenditure increased on the surface, going from €183.6 to €200.2 million. This increase takes into account new items, such as the 4.5 million euro contribution transferred to

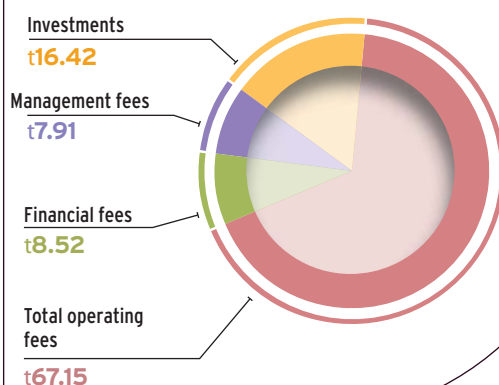
CHANGE IN TONNAGE FEES

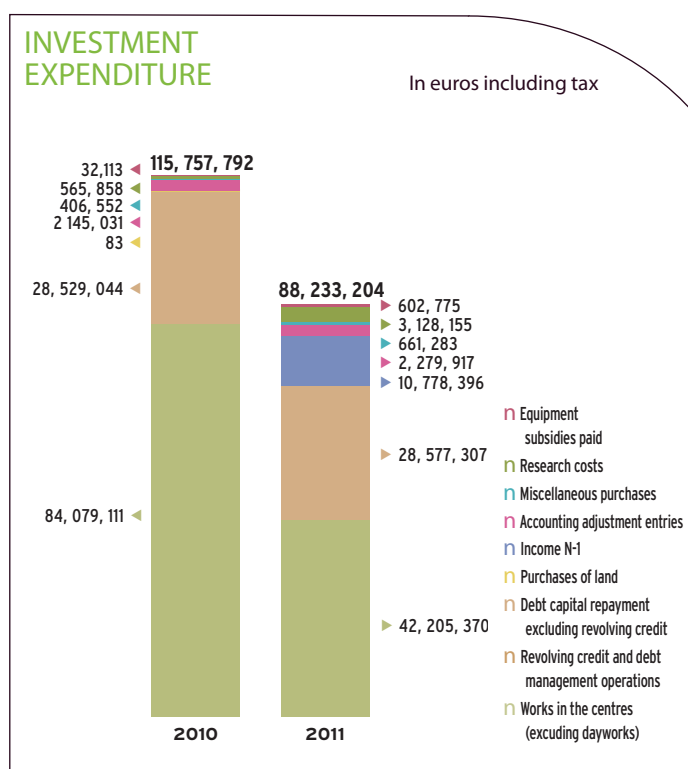
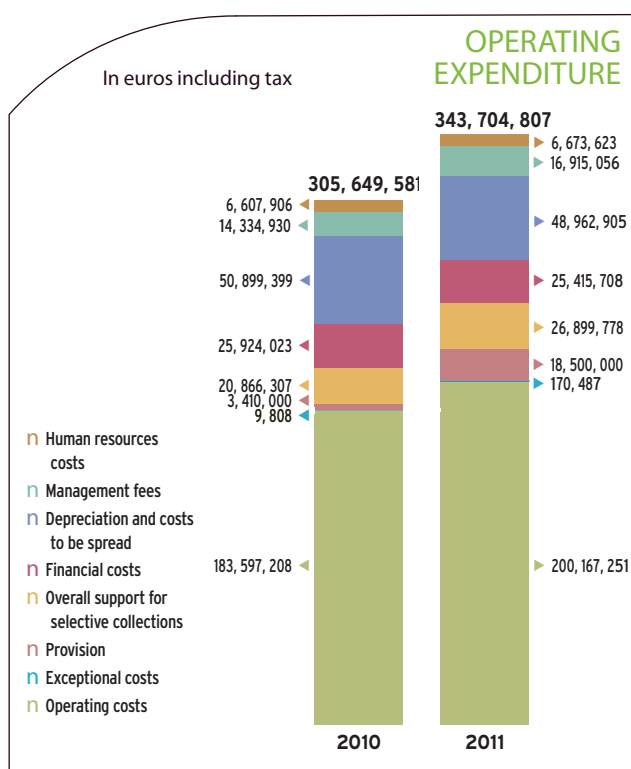
In euros/tonne



USE OF FEES

For 100 euros





INVESTMENT OPERATING

In euros including tax

Administrative account	2010	2011
Contributions from member local authorities	272,752,802	287,245,439
Allocations, subsidies (including Éco-Emballages and Éco-Folio) and contributions	24,637,833	29,176,367
Other products from current management (including marketing of products)	25,230,648	44,006,539
Reversals of provisions	-	-
Exceptional income, management and other	5,820,979	5,038,554
Income N-1	4,988,660	19,781,340
Total operating income	333,430,921	385,248,239

INVESTMENT INCOME

In euros including tax

Administrative account	2010	2011
Loans, including debt management and excluding asset operations	-	-
Subsidies	1,504,994	3,253,600
VAT compensation fund	16,028,104	5,544,294
Depreciation of assets + costs to be spread	50,899,399	48,962,905
Allocation of the operating income N-1	17,358,199	8,000,000
Other accounting adjustment entries and contributions for third parties	8,849,460	805,043
Reserves and income N-1	10,460,603	-
Total investment income	105,100,759	66,565,841

INVESTMENT PROGRAMME PER SITE

In €M tax

Site	Type of programme	Operating period	Work financed in 2010	Work financed in 2011	Total investment
Isséane	Processing centre (including land)	1998-2012	8.08	2.46	593.00
Saint-Ouen	Bringing up to standard and ongoing improvements	2011	0.43	1.40	1.40
Ivry-Paris XIII	Bringing up to standard and ongoing improvements	2011	0.64	0.55	0.55
Ivry-Paris XIII	Work to extend the life of the centre	2008-2012	31.63	21.08	64.68
Ivry-Paris XIII	Repurchase of TIRU detached parts stock	2011	0	0.25	0.25
Sevran	Selective collection	2003-2012	1.30	0.04	16.69
Paris XV	Sorting centre	2004-2012	12.49	3.71	30.65
Nanterre	Bringing up to standard and ongoing improvements	2011	1.61	0.27	0.27
Romainville	Selective collection	2011	0	0	0
Romainville/Bobigny	Sorting/methanisation centre	2005-2017	5.45	4.02	276.31
Blanc-Mesnil/Aulnay-sous-Bois	Centre for methanisation of waste and silt	2006-2018	1.24	0.77	45.20
Saint-Denis	Transfer centre	2007-2012	0.28	0.02	1.33
Ivry II	Multi-channel centre (research costs)	2007-2023	0.44	2.23	-
Isséane	Bringing up to standard and ongoing improvements	2011	0.58	0.81	0.81
Sevran	Bringing up to standard and ongoing improvements	2011	0.03	0.03	0.03
Saint-Ouen	Urban integration	2011	0	0.02	0.02
Total			64.21	37.66	

SIGIDURS (expenditure compensated by income of the same amount) and exceptional items such as the takeover of the TIRU stock in Ivry- Paris XIII for a total of €2.1 million.

This change can also be explained by the extra cost of the TGAP tax which reached €5.8 million in 2011 (compared with 5 million in 2010).

After these items are taken into account, the net increase is 4.9%.

At the same time, it is to be noted that the renewal of the contract to operate the incineration centre in Ivry-Paris led to substantial savings of 13 million euro compared to the previous contract.

Support for selective collections +29%

In 2011, Syctom continued its financial efforts (to the sum of €125.89 per incoming tonne) in favour of support for selective collections.

It transferred to its member local authorities income from glass as well as almost all of the additional aid granted by Éco-Emballages in accordance with the bareme E scheme. In addition, it increased its support with a view to promoting recycling of household waste.

Combined with a rise in tonnage, the introduction of the bareme E scheme and the pro-active policy adopted by Syctom explain the strong increase in support for selective collections. It increased to €26.9 million in 2011, from €20.9 million in 2010.

Human resources costs: 2% of operating expenditure

With 118 agents, staff has remained stable for four years and payroll still represents 2% of operating expenditure, or €6.7 million in 2011.

Increase in self-financing

Depreciations amounted to around €49 million in 2011, including almost €23 million for the only processing centre, Isséane, commissioned in 2008. They make up 14% of operating costs (compared to 17% in 2010). Along with the partial allocation of the 2010 operating income, this high level of depreciations brings the total rate of Syctom's self-financing to 85% (€55 million).

A break from investment

After a 91% increase in 2010 due to the completion of the sorting centre in Paris XV and the extension works at Ivry-Paris XIII, investment expenditure fell by around 50% in 2011, amounting to €42.2 (compared with €84 million in 2010). They have gone back to their 2009 level and represent 48% of Syctom's investment expenditure.

2011 was characterised in particular by the reduction in volume of the extension works at Ivry-Paris XIII (€21 million compared to €32 million in 2010), by continuous improvement works such as the recycling of industrial water at the incineration plant in Saint-Ouen, by carrying out less credit-consuming studies on Syctom's different projects (transformation of the Ivry-Paris XIII centre and, to a lesser extent, the multi-channel centre in Romainville, the methanisation unit in Blanc-Mesnil/Aulnay-sous-Bois, sorting centre in Paris XVII, etc.) and by the officials' decision not to reconstruct the centre for pre-sorting of bulky objects in Saint-Denis.

Continuing debt reduction: - €28.6 million

At 31 December 2011, the stock of Syctom's debt amounted to €596.3 million instead of €624.8 million at 31 December 2010. It has decreased for the third year running, or total debt reduction of €71 million since 2008.

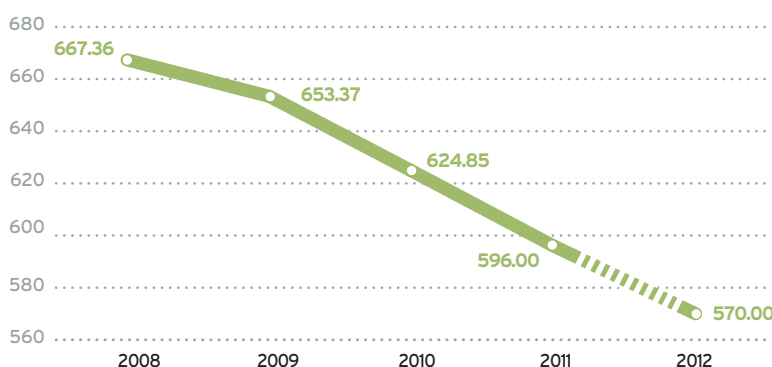
Investment requirements lower than the high levels required during the 2003-2008 period and an increase in self-financing allowed Syctom to avoid taking out new loans.

At 31 December 2011, the average rate of interest of Syctom's debt was 4.08%, compared to 4.09% in 2010. This stability is due to the fact that fixed rate loans represent 65% of its debt.

Syctom's financial charges decreased from €25.9 million in 2010 to €25.4 million in 2011, a drop of €500,000 principally due to the reduction in the outstanding debt.

CHANGES IN SYCTOM'S DEBT

In millions of euros

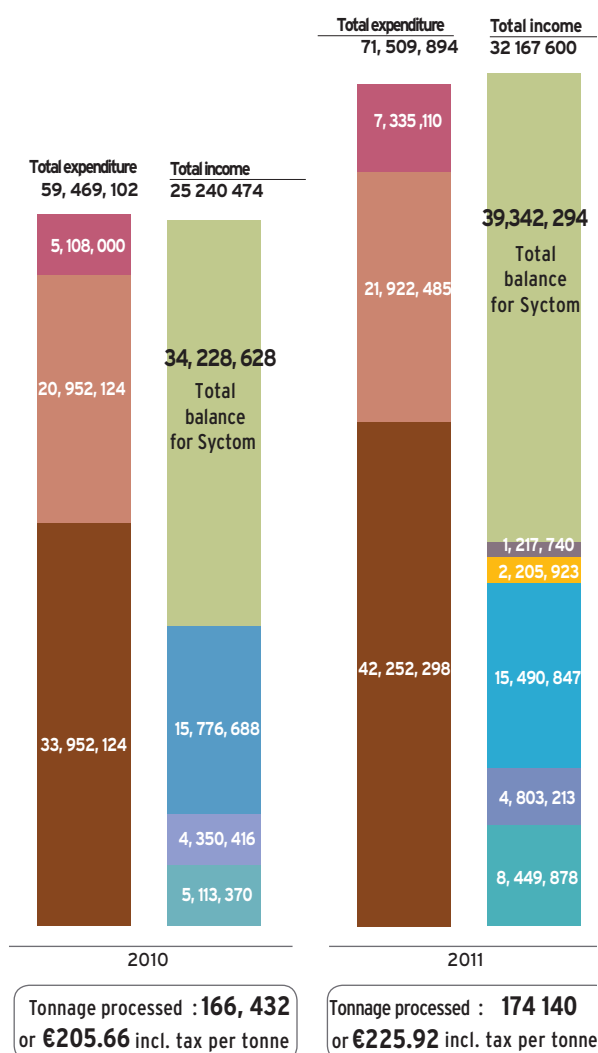


OVERALL COST OF SELECTIVE COLLECTIONS

In current euros

(excluding transfer of glass and including processing rejects)

The operating costs of SC per tonne went from €78.55 in 2010 to €86.17 in 2011 due to inflation and the increase in depreciations (commissioning of Paris 15). The historical support for SC paid by Syctom to its member local authorities remains unchanged at €125.89/t. Added to this is an additional transfer of €33.50, related to the new support policy introduced for the transition to the scheme and financed by Eco-Emballages aid. The net cost of SC processing thus increased in 2010 compared to 2010: €225.92/t compared to €205.66/t in 2010.



- n Depreciations and financial fees
- n Operating costs incl. tax (including processing and sorting rejects)
- n Syctom's aid to municipalities (aid for selective collection € 125,89)
- n Transfer Eco-Emballages support to municipalities
- n Eco-Emballages ans EcoFolio support
- n Sale of newspapers/magazines
- n Sale of packaging materials to channels
- n Total balance for Syctom financed by fees

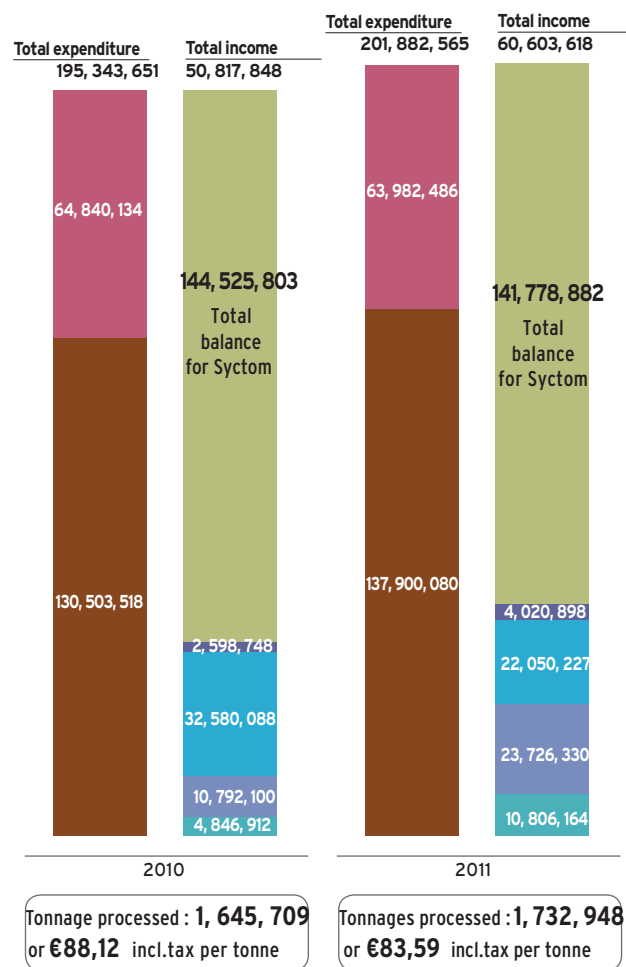
n Income from glass transfer to municipalities

*or €13/t financed by support for energy recovery of bareme E scheme returning cost at €212,91 incl. tax

OVERALL COST OF INCINERATION WITH ENERGY RECOVERY

In current euros

In 2011, the cost of incineration with energy recovery posted a decrease of 5.1% compared to 2010, with a cost of €83.59/t as against €88.12/t in 2010 respectively. This decrease is due to the high increase in income (over 10 million euro) while expenditure only increased by 6 million, and especially the positive effect of the competitive tendering of the renewal of the contract to operate Ivry-Paris XIII (saving 13 million euro).



- n Depreciations and financial fees
- n Operating costs incl. tax with decompensation sale energy (of which processing residues and clinkers and transfer to HWIU)

- n Income from recovery of by-products of clinkers
- n Income Saint-Ouen and Ivry-Paris XIII (decompensation sale of steam and electricity)
- n Income from sale steam and electricity - Isséane et Ivry-Paris XIII since february 2011
- n Eco-Emballages support for energy recovery
- n Total balance for Syctom financed by fees

Costs of processing bulky objects and technical landfill:

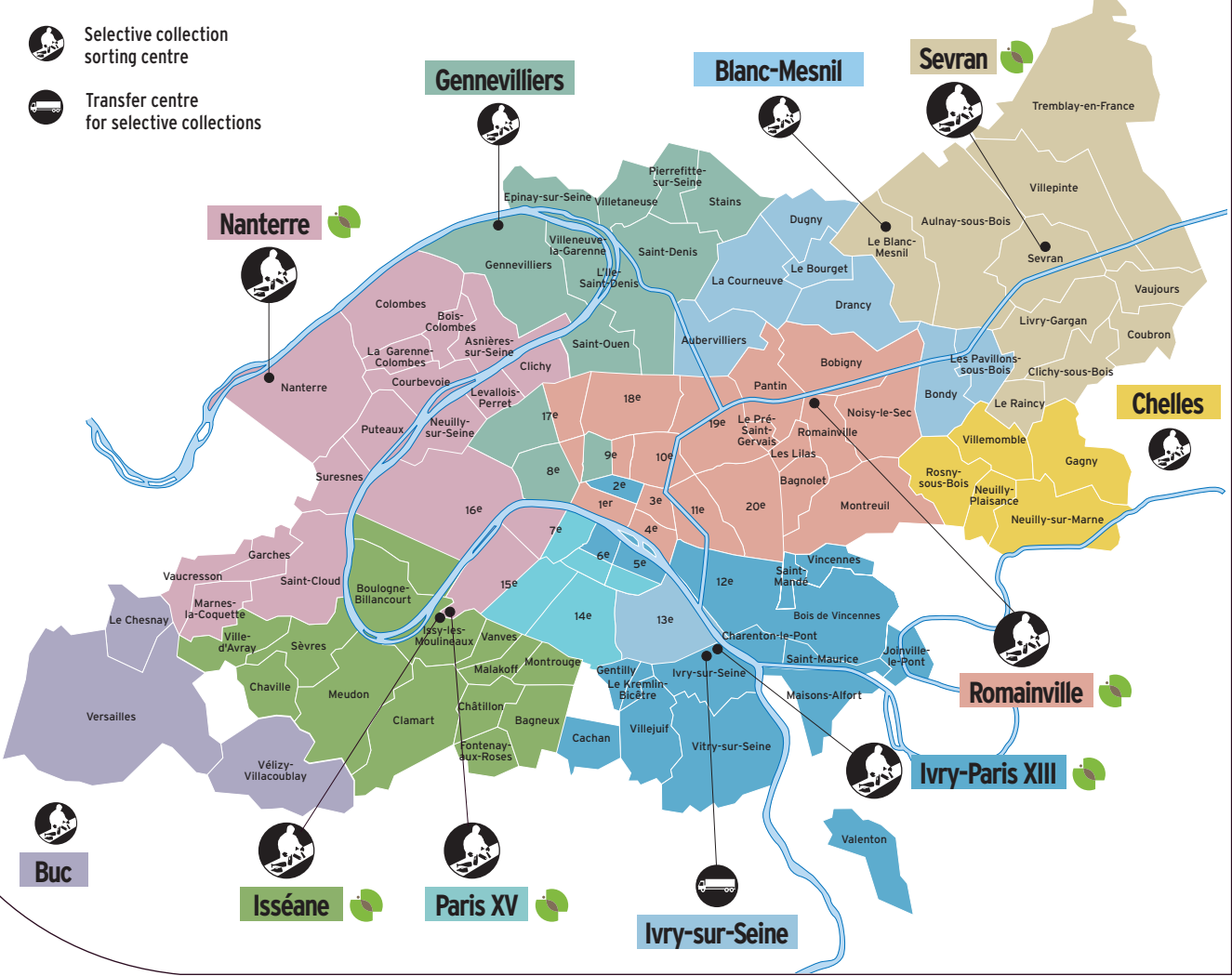
The cost of processing bulky objects has increased by 1.8%. It amounts to €100.02 incl. tax per tonne compared to €98.22/t incl. tax in 2010. Landfill costs have also increased by 2.8%, at a cost of €92.20/t compared with €89.69/t in 2010. These increases are the result of inflation.

DETAILED OVERVIEW

ORDER

2011 SELECTIVE COLLECTION CATCHMENT AREAS

Selective collection sorting centres mobilised by Syctom en 2011 and their catchment area



SELECTIVE COLLECTIONS

In tonnes

Centre	Tonnage received	Tonnage sorted	Tonnage recovered	Operator
Ivry-Paris XIII	30,267	29,613	20,783	SITA
Romainville	35,506	29,943	19,610	Urbaser Environnement
Nanterre	33,091	32,606	22,786	Veolia Propreté
Paris XV	13,014	13,014	9,219	Coved
Isséane	22,467	22,454	17,341	TSI
Sevrans	10,475	10,220	7,831	Veolia Propreté
Gennevilliers	14,311	14,305	8,938	SITA
Buc	7,086	7,086	4,510	Nicollin
Ivry-sur-Seine (waste transferred to Blanc-Mesnil for sorting)	3,745	9,260	6,023	Paprec
Blanc-Mesnil	5,515			
Chelles	5,639	5,639	3,880	Généris
Total	181,116	174,140	120,921	

RECYCLABLE MATERIALS RECOVERY CHANNELS

In tonnes

Material	Tonnage recycled	Channel	Future	Transport
Newspapers and magazines	58,478	UPM-Chapelle Darblay paper mill in Grand-Couronne (76)	Newspaper	River (barge or containers)
EMR (brown cardboard + thin cardboard packaging)	31,958	Europac (76), Sacia (02), Emin Leyder (10)	Brown cardboard	River transport (testing)
Paper mix	17,248	Various paper factories in France and Europe	Brown cardboard	Lorry
Packaging for liquids (ELA)	1,101	Georgia Pacific paper mill (17) and Nova Tissue (88)	Toilet paper and kitchen roll	Lorry
Plastic PET bottles	6,477	France Plastiques Recyclage factory in Limay (78)	Granules used to make bottles	River transport from Gennevilliers
Plastic PEHD bottles	2,714	Various factories in France and Europe	PEHD products (cleaning pipes, watering cans, etc.)	Lorry
Aluminium from selective collections	139	Regeal-Affimet factory in Compiègne (60)	Aluminium used to cast various parts (particularly in the car sector)	Lorry
Aluminium from clinkers	2,599	Recovered by Corepa in Bruyères-sur-Oise (95) then sent to the Refinal factory (59)	Aluminium used to cast various parts (particularly in the car sector)	Lorry
Steel from selective collections	2,377	Recovered by TIRFER in Bonneuil-sur-Marne (94) then sent to steel factories (North of France and Benelux)	Steel products	Lorry
Steel from clinkers	33,292	Same as for steel from selective collections	Steel products	Lorry

BULKY OBJECTS

In tonnes

Bulky object sorting centres	Tonnage received	Tonnage recovered	Operator
Pierrefitte	14,419	7,553	CDIF
Gennevilliers	29,145	14,363	SITA
Gennevilliers	9,961	5,118	Paprec
Claye-Souilly	10,200	4,612	REP
Gennevilliers	5,320	2,724	REP
Villeneuve-le-Roi	7,407	4,133	Paprec
Buc	8,765	4,729	Nicollin

Bulky object transfer centre	Tonnage received	Tonnage recovered	Selective collection
Chelles (Généris)	7,832	3,539	Claye-Souilly REP
Noisy (Généris)	21,582	9,760	Claye-Souilly REP
Ivry Cémex	12,446	5,638	Claye-Souilly REP
Chatillon (Veolia Propreté)	7,172	3,377	Claye-Souilly REP
Ivry (CFF)	30,495	11,775	Gennevilliers SITA
Saint-Denis (Généris)	13,276	6,446	Bonneuil Veolia
Ivry (SOFRAT)	10,949	5,525	Villeneuve-le-Roi
Total bulky objects	188,969	89,310	

WASTE RECEPTION CENTRES

In tonnes

Centres	Waste reception centres		Operator
	Tonnage received	Tonnage recovered	
Romainville	14,016	5,168	Urbaser Environnement
Saint-Denis	1,673	1,266	Veolia
Ivry-Paris XIII	6,163	5,224	SITA
Total	21,852	11,658	

Syctom divides its sphere into collection zones known as catchment areas. Associated with a processing centre, each area is designed to limit the distance covered by skips – their diameter is 5 to 6 kilometres as far as residual household waste is concerned.

In the event of centre shutdown (for works or due to industrial action), Syctom divides up the catchment areas following the same logic of optimising distances with regard to the processing capacities available.

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CONTROL OF ATMOSPHERIC EMISSIONS IN INCINERATION CENTRES WITH SYCTOM ENERGY RECOVERY

Type of waste	Maximum emission values applicable since 28/12/2005	Ivry-Paris XIII				Saint-Ouen				Isséane					
	Ministerial order of 20/09/2002	Feb 11	May 11	Sept 11	Dec 11	Feb 11	Apr 11	July 11	Oct 11	March 11	June 11	June 11 (SYCTOM)	Sept 11	Dec 11	Dec 11 (SYCTOM)
Concentrations in mg/Nm ³ at 11% of O ₂															
Particles	10	7.1	6.0	6.2	1.2	1.5	1.2	0.8	3.1	0.9	0.7	1.3	0.4	1.0	0.1
Hydrochloric acid	10	3.2	1.5	1.2	1.0	1.3	3.1	0.5	1.2	2.7	9.3	8.8	5.2	7.2	9.3
Hydrofluoric acid	1	0.8	0.2	0.1	0.2	0.20	0.1	0.1	0.1	0.10	0.09	0.07	0.09	0.2	0.1
Sulphur dioxide	50	16	31	9	21	7	12	6	9	2	4	5	1	2	1
Nitrogen oxide	200 (80**)	89 ^[1]	64	43	58	56	57	56	55	43	33	45	43	41	39
Cadmium + thallium	0.05	0.011	0.004	0.007	0.008	0.001	0.004	0.002	0.004	0.001	0.003	0.003	0.021	0.009	0.002
Mercury	0.05	0.004	0.003	0.002	0.002	0.006	0.008	0.024	0.010	0.088 ^[2]	0.007	0.008	0.006	0.003	0.009
Antimony + arsenic+ lead + chromium + cobalt + copper + manganese + nickel + vanadium	0.50	0.19	0.09	0.12	0.13	0.06	0.05	0.09	0.05	0.05	0.14	0.11	0.09	0.15	0.02
Dioxins and furans (in ng/Nm ³) ³	0.10	0.020	0.002	0.014	0.016	0.022	0.005	0.0051	0.0047	0.003	0.001	0.003	0.001	0.001	0.003

** Maximum value set by the Paris region plan for the protection of the atmosphere (it is 200 for the other regions).

This threshold is repeated in the authorisation order to operate in Ivry-Paris XIII and Saint-Ouen. At Isséane, the authorisation order delivered by the Prefect of the Hauts-de-Seine sets the threshold for emission of nitrogen oxides at 70mg/Nm³.

[1] The value obtained is included in the daily (80mg/Nm³) and half-hourly regulatory thresholds (160mg/Nm³).

This double comparison is attributable to the fact that the occasional control of emissions by the laboratory for this parameter is not done over 24 hours but over a sampling range of several hours. The continuous measurements taken by the operator as part of self-checking over the same period, integrated over 24 hours and every 30 minutes, remained lower than the applicable regulatory thresholds.

[2] This measure led to an action plan carried out by the operator: improving control of the injection of lignite coke, changing the reagent and carrying out of monthly controls on this parameter in 2011.

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

REFIOM transported to the ISDD

Villeparisis (Syctom contract) from:	
HWIU Ivry-Paris XIII	13,241
HWIU Isséane	11,192
HWIU Saint-Ouen	12,905
Total ISDD	37,338

Inert waste transported to the ISDI

Claye-Souilly (Syctom contract) from:	
Construction debris waste reception centre in St Denis	1,022
Construction debris waste reception centre in Ivry-Paris XIII	3,735
Construction debris waste reception centre in Romainville	3,814
Sorted construction debris in Claye	20,441
Total ISDI	29,013

Non-hazardous waste transported to the ISDND

ISDND Bouqueval (Syctom contract)	
Bulky waste rejects Saint-Denis centre	2,070
Waste reception centre rejects Romainville	10,393
Household waste Romainville centre	105,790
Total	118,253

ISDND Claye-Souilly (Syctom contract)	
Household waste (direct contributions)	74,998
Household waste Romainville centre	52,501
Household waste HWIU Ivry-Paris XIII centre	78,995
Household waste HWIU Saint-Ouen	9,932
Household waste energy recovery unit Isséane	11,402
Selective collection rejects and reclassification in Sevran	2,357
Bulky waste rejects Bonneuil centre	5,288
Bulky waste rejects Gennevilliers centre	1,514
Total	236,987

TOTAL ISDND Syctom contracts	355,240
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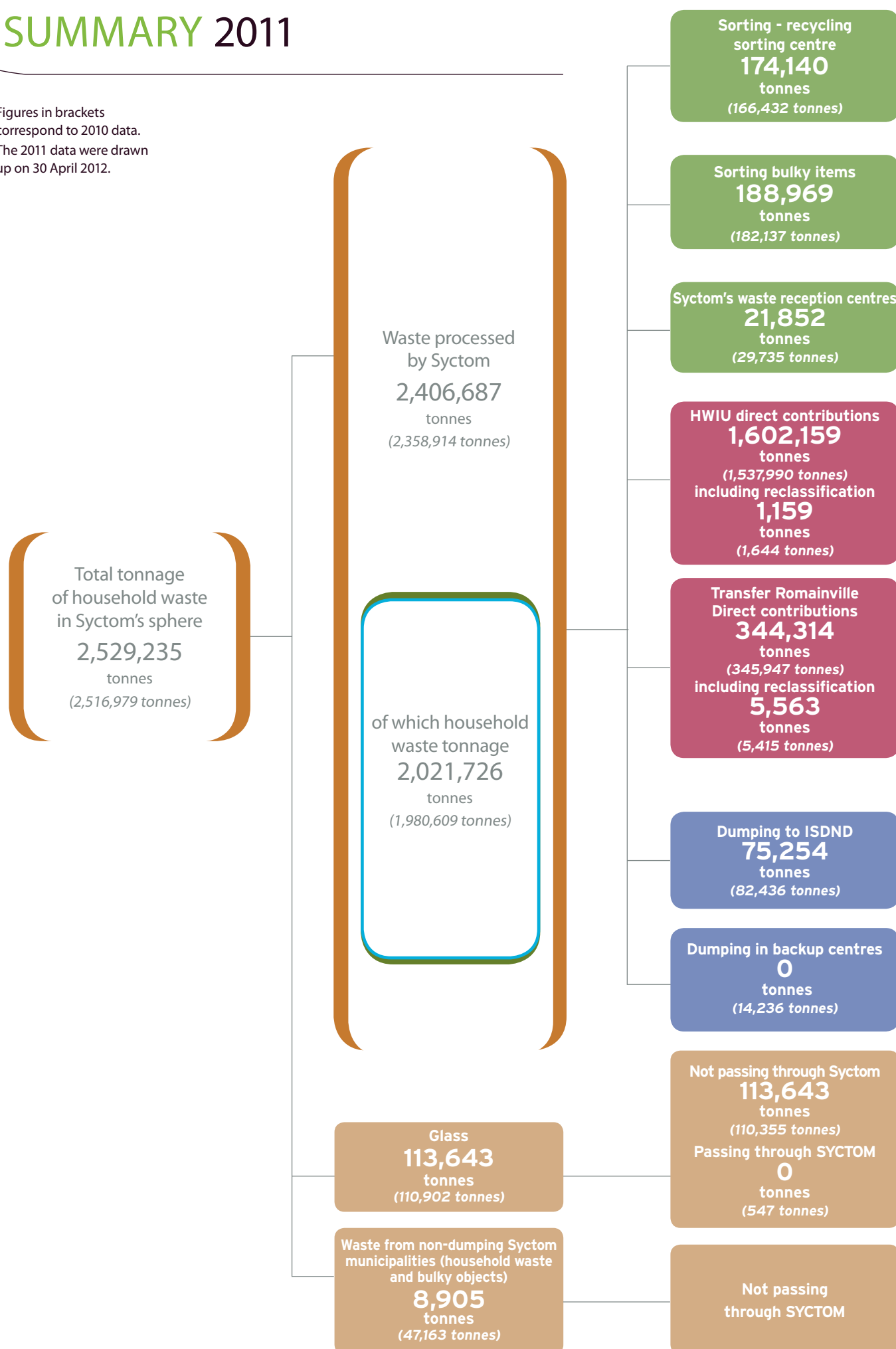
ISDND (excluding Syctom contracts)	
Sorting rejects selective collections private contracts to REP	870
Sorting rejects private contracts to other ISDND	3,540
Sorting rejects bulky waste	89,902
private HWIUs	16
Total	94,328

TOTAL ISDND DUMPED IN LANDFILL CENTRE	449,568*
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* The 53 t difference with the data 449,515 t (cf p.45), can be explained by the fact that some tonnage is stored in a tank.

2009 OPERATING SUMMARY 2011

Figures in brackets
correspond to 2010 data.
The 2011 data were drawn
up on 30 April 2012.



Centres SYCTOM
137,850 tonnes
(124,498 tonnes)

Private centres
36,290 tonnes
(41,934 tonnes)

Centres SYCTOM
13,276 tonnes
(30,565 tonnes)

Private centres
175,694 tonnes
(151,573 tonnes)

Syctom's waste reception centres
21,852 tonnes
(29,735 tonnes)

HWIUs SYCTOM
1,413,595 tonnes
(1,410,752 tonnes)

Private HWIUs
87,973 tonnes
(48,367 tonnes)

ISDND
100,344 tonnes
(78,872 tonnes)

HWIUs SYCTOM
134,039 tonnes
(121,007 tonnes)

Private HWIUs
54,535 tonnes
(19,427 tonnes)

ISDND
153,652 tonnes
(201,719 tonnes)

Direct contributions
74,998 tonnes
(82,178 tonnes)
reclassification
255 tonnes
(258 tonnes)

Syctom HWIUs 0 tonnes
Private HWIUs 0 tonnes

ISDND 0 tonnes

Private HWIUs
0 tonnes
(38,470 tonnes)

ISDND
8,905 tonnes
(8,693 tonnes)

Recycling 120,921 tonnes
(114,700 tonnes)

Incinerated refuse 41,868 tonnes
(40,862 tonnes)

Refuse sent to ISDND 11,352 tonnes
(10,870 tonnes)

Recovery 89,310 tonnes
(85,069 tonnes)

Refuse sent to ISDND 99,659 tonnes
(97,069 tonnes)

Recovery 11,658 tonnes
(14,248 tonnes)

Incinerated refuse 939 tonnes
(816 tonnes)

Refuse sent to ISDND 9,255 tonnes
(14,671 tonnes)

Evacuated clinkers 327,550 tonnes
(315,331 tonnes)

Ferrous sold 34,012 tonnes
(34,863 tonnes)

Non-ferrous sold 2,667 tonnes
(2,609 tonnes)

REFIOM 42,228 tonnes
(including PSR 2,996 t) (40,003 tonnes)

Electricity sold 187,396 MWh
(128,649 MWh)

Steam (other) 26,028 MWh
(2,800 MWh)

Steam sold (CPCU) 2,417,124 MWh
(2,450,394 MWh)

Recycling 113,643 tonnes
(111,062 tonnes)

**Total
materials recovery**
691,679
tonnes

i.e. **27%*** of waste
(677,881 tonnes)
of which clinkers, ferrous
and non-ferrous

356,147
tonnes
(352,803 tonnes)

Total energy recovery

Household waste
+ reclassification + sorting rejects

1,732,948
tonnes

i.e. **57%*** of waste
(1,645,709 tonnes)

**Total Syctom
Buried in ISDND**

Household waste
+ reclassification

329,249
tonnes

(372,785 tonnes)

Household waste
+ reclassification + sorting rejects

449,515
tonnes

i.e. **18%** of waste
(495,396 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 ON THE PRICE AND QUALITY OF THE PUBLIC SERVICE FOR ELIMINATING WASTE

(in application of decree no. 2000-404 of 11 May 2000). Technical and financial indicators for 2011.

This document will be put to a vote by the Committee of Syctom, the French agency for household waste, during its meeting on 21 June 2012.

SYCTOM PROCESSING UNITS AND TONNAGE PROCESSED

3 incineration centres with energy recovery

(In tonnes)	Capacity of the operating order	Capacity Technical	Quantities incinerated
Ivry-Paris XIII	730,000	670,000	542,881
Saint-Ouen	650,000	605,000	587,749
Isséane	460,000	460,000	459,772

5 selective collection sorting centres

(In tonnes)	Capacity of the operating Order	Technical capacities*	Quantities received
Nanterre	40,000	33,000	33,091
Ivry-Paris XIII	36,000	30,000	30,267
Romainville	45,000	35,000	35,506
Isséane	22,500	22,500	22,467
Sevran	10,000	10,000	10,475
Paris XV	15,000	15,000	13,014

*Depending on the number of units in the sorting centre

1 centre for the pre-sorting of bulky objects

(In tonnes)	Capacities	Received quantities
Saint-Denis*	60,000	30,565

*The centre for the pre-sorting of bulky objects and the waste reception centre have been closed since June 2010.

1 residual household waste transfer centre

(In tonnes)	Capacities	Received quantities
Romainville	350,000	344,314

3 waste reception centres

(In tonnes)	Capacities	Received quantities
Ivry-Paris XIII		6,163
Saint-Denis		1,673
Romainville		14,016

PRIVATE UNITS USED BY SYCTOM AND TONNAGE PROCESSED

Incineration centres

(In tonnes)	Operator	Quantities incinerated
Argenteuil	Novergie	36,019
St-Thibault-des-Vignes	Novergie	50,643
Sarcelles	SAREN (Véolia)	39,560
Carrières/Seine	Novergie	16,727

Sorting centres

(In tonnes)	Operator	Quantities received
Buc	Nicollin	SC: 7,086 BO: 8,765
Chatillon	Veolia	BO: 7,172
Chelles	Généris	SC: 5,639 BO: 7,832
Claye-Souilly	REP	BO: 10,200
Gennevilliers	REP	BO: 5,320
Gennevilliers	SITA	SC: 14,312 BO: 29,145
Ivry	CFF	BO: 30,495
Ivry-Blanc-Mesnil	Paprec	SC: 9,260
Villeneuve-le-Roi	Paprec	BO: 7,407
Noisy	Véolia	BO: 21,582
Ivry	CEMEX	BO: 12,446
Ivry	SOFRAT	BO: 10,949
Pierrefitte	CDIF	BO: 14,419
Gennevilliers	Paprec	BO: 9,961

Installations for storing hazardous or non-hazardous waste

(In tonnes)	Operator	Quantities
ISDD Villeparisis	SITA	Refiom: 37,425
ISDND Bouqueval	REP	118,253
ISDND Claye-Souilly	REP	237,234
ISDI	REP	29,013
Other ISDND (excluding Syctom contracts)		102,162

OVERALL ANNUAL SUMMARY

No. of municipalities in Syctom's scope	No. of inhabitants in Syctom's scope	Gross tonnage of waste			Selective collection			Fees	
		household waste, sweepings and green waste	bulky objects	NHIW	newspapers and magazines, multimaterials, paper, cardboard	Glass	waste reception centre	population share	tonnage share
84	5,709,130	2,021,726 t, i.e. 354.1kg/person/year	188,969 t, i.e. 33.1kg/person/year	841 t	174,140 i.e. 30.5kg/person/year	0 t	21,852 t	€7.06	€101.72

EXPENDITURE AND INCOME

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 2010 administrative account - Excluding provisions)	€278.3M
Terms and conditions for financing the general processing service	Contribution from local authorities, Éco-Emballages support for selective collections, product sales
Terms and conditions for setting the special fee for the disposal of assimilated products	non applicable
Annual total of main contracted services in €M incl. tax	€175.6M incl. tax
Overall cost per tonne of waste picked up from the bulky object refuse service (processing or landfill) and including transport and storage of sorting rejects	€100.02/t
Overall cost of processing selective collections	€225.92/t
Overall cost of incineration with energy recovery	€83.59/t
Cost of landfill	€92.20/t
Income from access rights to processing and landfill centres at which the local authority is the project owner for assimilated waste	non applicable
Reversal for the selective collection	Multi-materials excluding glass, newspapers and magazines, office papers and single-material cardboard and specific aid relating to the bareme E scheme: 24.1M€
Itemised amount of aid received from certified bodies: Support per sorted tonne	
Éco-Emballages	€25.4 million
ÉcoFolio	€2.9 million

RECOVERY

Recovery of material from incineration	Multi-material recovery	Recovery from bulky objects	Recovery from waste reception centres	Recovery in composting units	Landfill
Electricity: 187,396 MWh Steam: 2,417,124 MWh Clinkers: 327,550 t Ferrous: 34,012 t Non-ferrous: 2,667 t	120,921 t of plastic, paper and cardboard, newspapers and magazines, steel and aluminium, small electrical appliances	89,310 t wood, scrap metal, cardboard boxes	11,658 t	0 t	449,762 t

Recovery of material from sorting (selective collection and bulky objects):

- Newspapers/magazines: €4.69M
- Plastics: €3.47M
- EMR packaging: €3.98M
- Paper mix: €1.6M
- Steel: €0.38M
- Scrap metal from bulky objects: €0.79M
- Non-ferrous bulky objects: €0.12M
- Glass, wood and others: €1.53M

Materials recovery from incineration (in €M excl. tax):

- Scrap metal: €2.9M
- Aluminium from incineration: €1.4M

TOTAL income from materials recovery: €20.86M

Energy recovery (in €M excl. tax):

- Sale of steam and electricity (Isséane and Ivry-Paris XIII): €23.7M
- Sale of steam and electricity (Saint-Ouen): €22.1M

TOTAL income from energy recovery: €45.8M

Measures taken during the year to prevent or reduce the harmful effects on human health and the environment

• Control of atmospheric emissions and liquid waste.

The atmospheric emissions of Syctom's incineration units with energy recovery are controlled both by the operator (self-monitoring) and by external laboratories; these controls are not only regulatory but form part of Syctom's quality control process.

• Bio-monitoring campaigns to improve knowledge of the health and environmental impact of its installations.

- Launch of a contract for the technical and conformity testing of Syctom's installations.

- Launch of a contract relative to a mission assisting the operator with a view to putting in place new water treatment facilities which enable environmental

standards to be met and anticipate new regulatory constraints currently being defined.

• Improving working conditions of agents

- Launch of a contract relative to improving the conditions for maintenance access at the Isséane centre and reducing the dust in the centre by creating a shield around the baler and by adding air vents.

- Commissioning of a new sorting centre in Paris XV with optimised working conditions for agents: better visual comfort in sorting cabins, soundproof cabins, height-adjustable workstations, dust removal and ventilation of sorting cabins, deodorization of the collection reception hall.

- As part of the new contract to operate the selective collection sorting centre in

Nanterre, launch of a contract to carry out work to improve the centre's facilities with weighing hoppers for better steering of the sorting lines.

• Monitoring of installations

- Adoption of the environmental quality charter in the Ivry-Paris XIII centre including the operation of the current centre as well as monitoring (monitoring committee, Watchmen) and quality, safety and environmental protection conditions implemented for the construction of the future centre.

- Commissioning of the sorting centre in Paris XV and establishment of a quality charter concerning the visual and sound conditions of the unit, industrial waste management, water management and the use of renewable energies.

SYCTOM'S PARTNERS

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.



SYCTOM CENTRE
OPERATORS



- The European Union is implementing a common environmental policy. It acts particularly in the field of waste management. Its directives are transposed into French law by the State.
- The French Ministry for the Environment, Sustainable Development and Energy 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 specific recycling channels (packaging, batteries, e-waste, etc.).
- ADEME (French Environment and Energy Management Agency) is a public agency under the joint authority of the Ministries responsible for the Environment and Economy.
- 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 DRIEE (regional and interdepartmental department for the environment and energy) is responsible for inspecting rated installations under the authority of département prefects.
- The Ile-de-France regional authority is an important Syctom partner. As such, it supports "Metropolitan Waste Prevention 2010-2014". Since 2005 and the law on local freedoms and responsibilities, it has been responsible for drawing up a regional waste disposal programme. The Region also participates in Syctom's investments.
- SYELOM and SITOM93, the two Syctom member primary syndicates, carry out Syctom's actions in the Hauts-de-Seine and Seine-Saint-Denis départements. They also provide member local authorities with information, coordination and help with decision-making and help to monitor collections.
- SIEVD – In November 2011 Syctom signed a partnership agreement with the Rungis Inter-municipal Syndicate for the Use and Recovery of Waste (SIEVD) with a view to strengthening their cooperation in terms of reducing waste, sharing public waste processing facilities and launching a debate on changes to waste deposits.
- SIGIDURS – Syctom, who for many years has been in regular contact with SIGIDURS (whose scope borders that of Syctom between Seine-Saint-Denis and Val d'Oise) signed a cooperation agreement in December 2010 which came into effect on 1 January 2011, with two main aims: to prevent and reduce household and assimilated waste and to share public facilities for the sorting and processing of household and assimilated waste.
- Éco-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 2011, Syctom received €25.4 million from Éco-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.
- ÉcoFolio is an eco-organisation, responsible since 2007 for managing the eco-contributions from the publishers of free printed leaflets in order to pay for the recycling of their products. It subsidises local authorities for the collection and disposal of the flows generated, in particular from the distribution of unsolicited mail. In 2011, Syctom received €2.9 million.
- CPCU (Paris Urban Heating Company) and EDF buy the steam and electricity produced in Syctom's three incineration units.
- All Syctom's centres are operated by private companies, selected after calls for tender. Génériss (a subsidiary of Veolia Propreté) operates the sorting centres in Saint-Denis, Nanterre and Sevran. Coved operates the sorting centre in Paris XV. Urbaser Environnement operates the sorting centre in Romainville. SITA operates the sorting centre and Novergie the energy recovery unit in the multi-channel centre Ivry-Paris XIII. TIRU and SITA formed the company TSI to operate Isséane. TIRU operates the Saint-Ouen energy recovery centre.
- In order to add to its processing capacity, Syctom uses services provided by external centres operated by contractors: SITA, Nicollin, Génériss, Paprec, Veolia Propreté, CFF, the REP and Novergie.
- Finally, the clinkers from Syctom energy recovery centres are processed by the companies MRF, REP and TIRFER.

GLOSSARY

- ☒ **Voluntary drop-off:** method of selective collection whereby sorted materials are placed for recycling in specific containers located in public places (this often applies to the collection of glass).
- ☒ **Biogas:** gas produced by the 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 refuse. This source of energy has no impact on global warming insofar as the CO₂ released when it is burned is considered to have already been absorbed by plants during their growth.
- ☒ **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.
- ☒ **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.
- ☒ **Cogeneration:** the production of steam and electricity using the heat recovered during the combustion of waste.
- ☒ **SC (Selective collection):** the collection of waste presorted by residents for recycling (packaging, newspapers and magazines, glass).
- ☒ **DASRI:** Hazardous medical waste.
- ☒ **WEEE (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).
- ☒ **NHIW (Non-hazardous industrial waste):** waste from industry which can be processed in the same facilities as household waste.
- ☒ **Residual waste:** non-recoverable waste, residues from waste processing "which can no longer be processed in current technical and economic conditions, in particular by extracting the recoverable elements or limiting their polluting or hazardous character" (law of 13th July 1992).
- ☒ **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).
- ☒ **ELA:** packaging for liquid food, such as cartons.
- ☒ **EMR:** packaging thin, light cardboard packaging for food (cake packets, outer packaging for yoghurts, etc.).
- ☒ **Fossil energy:** energy produced from oil, gas and coal; non-renewable residues from the fossilisation of living organisms in the earth's sub-soil in geological time. The combustion of these sources of energy generates greenhouse gases.
- ☒ **Housing equivalent:** model home of 80m² occupied by 4 persons in a collective building built between 1995 and 2000.
- ☒ **EPCI:** (Public intermunicipal consultation institutes) are groups of municipalities which seek to draw up common development projects within a solidarity framework.
- ☒ **Fine particulate matter:** waste that is too small to be detected.
- ☒ **GHG (greenhouse gases):** they help create a greenhouse effect which retains heat around the earth. An excessive concentration of GHG leads to climate disturbances. The gases can be natural (carbon dioxide, methane or ozone) or produced by man (like gas carbon, produced by burning fuel).
- ☒ **Incineration:** method of thermal processing of waste by combustion with energy recovery.
- ☒ **Classified installations:** installations which may be a source of danger or pollution and the operation of which is regulated. A distinction is made between those which are subject to declaration at the prefecture and those who are subject to authorisation from the prefecture following public enquiry, such as waste processing installations.
- ☒ **(landfill installations for hazardous waste) and ISDND (landfill installations for non hazardous waste)** are used to store waste in an environmentally-friendly way. ISDD (formerly CET1) collect hazardous waste (REFIOM, asbestos, polluted soil, etc.).
- ☒ **ISDI:** Landfill installation for inert waste.
- ☒ **ISDND (formerly CET2).** ISDND are used to collect non hazardous residual waste (see "Royal" law of 1992) (HW, selective collection rejects, bulky object rejects, non-hazardous industrial waste, etc.). Class 3 landfill centres collect inert waste (construction debris, etc.).
- ☒ **HQE (High environmental quality):** the industrial buildings used by Syctom are designed according to HQE principles.
- ☒ **NEWSPAPERS AND MAGAZINES:** Newspapers and magazines
- ☒ **Leachates:** water which, after percolating through waste stored in landfill, carries bacteria and chemicals. It pollutes and must be treated before it can be returned to the natural environment.
- ☒ **Clinkers or slag:** noncombustible residues produced at the outputs from incineration furnaces. After ageing, they can be used in road works.
- ☒ **Heavy metals:** metals which, if they accumulate in the environment, pose dangers for human health, such as lead, cadmium and mercury.
- ☒ **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.
- ☒ **HW (household waste):** residual waste from daily household activity.
- ☒ **BO (Bulky or over-sized objects):** household waste too large to be put in a household bin (large electrical appliances, furniture, etc.).
- ☒ **SEA:** Small electrical appliances.
- ☒ **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 terephthalate):** 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.
- ☒ **PLP:** local prevention programmes
- ☒ **PREDMA:** regional plan for the elimination of household and related waste.
- ☒ **REFIOM (Residues from smoke-scrubbing after household waste incineration):** residues from household waste incineration plants made up of particle removal residues and residues from the smokescrubbing process. They are processed or stabilised before being placed in a site for hazardous waste.
- ☒ **Sorting rejects (undesirables):** excessively dirty packaging or materials which cannot be recovered for recycling.
- ☒ **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.
- ☒ **HWIUS:** household waste incineration unit.
- ☒ **Recovery:** the reuse or any other measure aimed at obtaining reusable materials or energy from waste. (Source: European Framework Directive 1991).
- ☒ **Energy recovery:** procedure consisting of using the calories contained in waste, burning them to recover the energy in the form of heat, steam or electricity.
- ☒ **Materials recovery:** recovery of waste by using its component materials, like the regeneration of used oil, the recycling of newspapers and magazines or packaging materials.
- ☒ **Organic recovery:** the recovery of organic waste, for example by composting.



l'agence
métropolitaine
des déchets
ménagers

35, bd de Sébastopol
75001 Paris

Tel. : +33 (0)1 40 13 17 00
Fax: +33 (0)1 45 08 54 77

www.Syctom-paris.fr