# ACTIVITY REPORT syctom





# SYCTOM'S IDENTITY CARD



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Jacques GAUTIER

President of Syctom since october 2017

**REDOUBLING OUR VIGILANCE** TO GUARANTEE THE CONTINUITY AND QUALITY OF THE PUBLIC WASTE TREATMENT SERVICE Jacques Gautier, soon to step down from the position he has held since October 2017 at the helm of Syctom, looks back on the events that made 2019 a pivotal year, on the measures taken during the Covid-19 health crisis to ensure the continuity of Syctom's mission, as well as on the challenges to take on in the future, so that the public waste treatment service remains efficient and responsible.

#### How did the year 2019 mark a milestone in becoming more aware of the challenges inherent to waste management?

The debates that punctuated the year made waste management a burning issue, in different ways. First of all, there was the project to implement a deposit system for plastic bottles, which we opposed. And then, there was an increase in the TGAP (General tax on polluting activities), provided for by the Finance Act for 2019, which we also disapproved. These two measures run counter to the momentum initiated in recent years to ensure that waste treatment is part of a rationale that is both environmentally friendly and economically viable. In addition, and arguably in a more directly palpable manner, the 2019 strikes underscored how absolutely essential waste treatment is. We had never been so aware of the immediate repercussions of any interruption in the public waste management service. The year 2019 therefore more than ever highlighted the strategic and health importance of the treatment of household waste.

#### It revealed the importance of waste treatment, but at the same time the fragility of the system. What does this translate into?

The Covid-19 health crisis has laid bare the fragility of a system whose sustainability depends on the agents who work for our activity and in our centres and on a both collective and individual financial effort. The collapse in raw material costs - starting in 2019, then in 2020, in correlation with crude oil prices - will inevitably result in a decline in the prices of the materials we sort and resell. This trend will not only weigh on our economic model, but it will also jeopardise the efforts made to "save the planet", at a time when we must more than ever reduce waste production, and recycle and reuse better.

More generally, this major crisis that we are going through will have financial impacts at all levels, including the financing of our activities. We will do our utmost to continue to modernise our industrial facilities, but there is concern that we may not have the financial and budgetary resources to complete all our projects on schedule. We will have to show redoubled agility and adaptability.

# How exactly can this agility and adaptability of the sector be guaranteed?

We need to be imaginative and persuasive in defending our convictions, especially on the urgent need to promote eco-design, so as to bring to market only products and materials that are economically recyclable.

There is also the need to deploy a more regional approach to waste treatment solutions. Syctom's territory, for example, which is highly dense and which has a heating network that is unique in France, calls for energy recovery from residual household waste, especially as we are aiming at zero landfill at the same time. We cannot therefore continue to dogmatically apply a uniform tax system without taking into account the specific regional context and the efforts made.

Finally, our ability to adapt will depend on our ability to better coordinate the actions of the various stakeholders involved in waste management. In this regard, the year 2019 mapped out encouraging prospects, with the launch of the Great Challenge. This unprecedented collective approach should allow us to make our public service more efficient, from an environmental and economic standpoint, in the interest of all.

#### THE RENEWAL OF THE SYNDICATE COMMITTEE POSTPONED

Due to the Covid-19 pandemic and the postponement of the second round of municipal elections, Syctom's Syndicate Committee could not be renewed in May 2020, as initially planned.

AT the end of the municipal elections, a meeting to appoint the new Syndicate Committee will be held with the elected officials designated by Syctom's member territories. They will elect the President and the 15 vice-presidents, as well as the Board members to govern the Syndicate.

# SYCTOM'S IDENTITY CARD



Since January 26, 2017, Syctom has been administered by a Syndicate Committee composed of 90 local elected officials representing 11 territories of the Metropolis of Greater Paris and the Versailles Grand Parc Agglomeration Community.

- It defines the syndicate's policy, votes on its budget, decides on investments and the management methods used.
- It rules on membership and withdrawal requests from local authorities.
- It elects the Board members and the members of the Tender Committee.

The Board is composed of the President, the 15 Vice-Presidents and 20 other representatives, i.e. 36 members in total. A part of the powers of the Syndicate Committee has been entrusted to the Bureau for better governance.

On 20 October 2017, the 90 delegates of the Syndicate Committee unanimously elected Jacques Gautier as Syctom's President.

#### RENEWAL OF THE SYNDICATE COMMITTEE

Due to the Covid-19 pandemic and the postponement of the second round of municipal elections, Syctom's Syndicate Committee could not be renewed in May 2020, as initially planned. At the end of the municipal elections, a meeting to appoint the new Syndicate Committee will be held with the elected officials designated by the local authorities in Syctom's territory.

#### PRESIDENT OF SYCTOM



Jacques GAUTIER Honorary Mayor and Municipal councillor of Garches

### T1 > PARIS

#### SYCTOM'S VICE-PRESIDENTS



1st Vice-President Deputy Mayor of Paris

Paul SIMONDON

#### SYCTOM'S BOARD MEMBERS



Catherine **BARATTI-ELBAZ** Mayor of the 12<sup>th</sup> arr. of Paris, Metropolitan councillor



DAGNAUD Mayor of the 19th arr. of Paris, Metropolitan councillor

Francois

SYCTOM'S DELEGATES





Jean-Noël



Julie BOILLOT Councillor of Paris, Metropolitan councillor



Maud GATEL Councillor of Paris



LEVIEUX Deputy Mavor of Paris

Véronique

**ALTERNATES** 

Éric AZIERE Councillor of Paris, Metropolitan councillor

Marinette BACHE Councillor of Paris, Metropolitan councillor

Nicolas BONNET-OULALDJ Councillor of Paris, Metropolitan councillor

Geoffroy BOULARD Councillor of Paris, Metropolitan councillor **Pierre-Yves** 

BOURNAZEL Councillor of Paris, Member of Parliament

Jacques BOUTAULT Mayor of the 2<sup>nd</sup> arr. of Paris

Anne-Charlotte BUFFETEAU Councillor of Paris

Emmanuelle DAUVERGNE Councillor of Paris, Regional councillor of Île-de-France

Jérôme COUMET 6th Vice-President Mayor of the 13th arr. of Paris, Metropolitan councillor

Hervé BÉGUÉ

Councillor

of Paris

Philippe

DUCLOUX

Councillor

of Paris

Pierre

AURIACOMBE

Councillor

of Paris

Claudine

BOUYGUES

Councillor

Christophe

Mayor of Paris,

Metropolitan councillor

Mayor of Paris,

Nathalie FANFANT

Councillor of Paris,

Councillor of Paris

Councillor of Paris,

Afaf GABELOTAUD

Pierre GABORIAU

Metropolitan councillor

Deputy Mayor of Paris,

Metropolitan councillor

Rémi FERAUD

Léa FILOCHE

enator,

Metropolitan councillor

Metropolitan

councillor

Jean-Louis

ΜΙSSIKA

Deputy

GIRARD

Deputy

of Paris



Jean-François LEGARET 10th Vice-President the 1<sup>st</sup> arr. of Paris, Regional councillor of Île-de-France



Anne SOUYRIS 11th Vice-President Deputy Mayor of Paris

Florence BERTHOUT Mayor of the 5th arr. of Paris, Regional councillor of Île-de-France

Patrick

TRÉMÈGE

of Paris

Pascale

BLADIER

CHASSAIGNE

Councillor

Frédérique

of Paris

Councillor



Claire DE CLERMONT-TONNERRE Councillor of Paris. Metropolitan councillor

Gypsie BLOCH

Councillor

of Paris

SYCTOM'S ELECTED OFFICIALS



Éric HELARD Councillor of Paris, Metropolitan councillor

Jean-Didier

BERTHAULT

Councillor

councillor

of Paris, Metropolitan



Galla BRIDIER

Metropolitan

Deputy

of Paris,

councillor

Antoinette

GUHL

Deputy

Mayor of Paris

Anne-Constance

ONGHENA

Councillor

councillor

Metropolitan

of Paris,

Jean-Jacques

GIANNESİNI

ouncillor of Paris,

Frédéric HOCQUARD

Deputy Mayor of Paris

Metropolitan councillor

Metropolitan councillor

Thierry HODENT

Councillor of Paris,

**Christian HONORE** 

Pénélope KOMITES

Deputy Mayor of Paris

Councillor of Paris

Metropolitan councillor

Mayor



CALANDRA Mayor of the 20th arr. of Paris, Metropolitan councillor

> Marie-Laure HAREL Councillor of Paris,

Former Minister, Councillor of Paris

> Valérie MONTANDON Councillor of Paris,

Metropolitan councillor

Annick OLIVIER

Étienne MERCIER Councillor of Paris Regional councillor of Île-de-France

Deputy Mayor of Paris

Councillor of Paris

Atanase PERIFAN

Nicolas NORDMAN

Councillor of Paris Karen TAIEB Deputy Mayor of Paris



Councillor of Paris

Yann WEHRLING Councillor of Paris,

Mercédès ZUNIGA Councillor of Paris

Councillor of Paris **T2** VALLÉE SUD GRAND PARIS







**AITERNATES** Carole HIRIGOYEN Deputy Mayor of Montrouge

Serge KEHYAYAN

Deputy Mayor of Clamart

SYCTOM'S DELEGATES



Alain LE THOMAS Deputy Mayor of Bagneux

of T2 Patrice RONCARI Deputy Mayor of Clamart

Benoît BLOT

Plessis-Robinson

Vice-President

Deputy

Mayor of



Philippe RIBATTO Deputy Mayor of Fontenayaux-Roses



councillor Alexandre VESPERINI

Councillor of Paris. Metropolitan councillor

Sergio TINTI

Francois VAUGLIN Mayor of the 11<sup>th</sup> arr. of Paris, Metropolitan



councillor

Regional councillor of Île-de-France

Metropolitan councillor

Daniel VAILLANT



Virainie DASPET Councillor of Paris







Thomas LAURET

Councillor of Paris

Catherine LECUYER

Councillor of Paris

Didier LE RESTE

Sandrine MEES

Councillor of Paris

Councillor of Paris

### **T3** GRAND PARIS SEINE OUEST

#### SYCTOM'S VICE-PRESIDENTS



#### André SANTINI 3<sup>rd</sup> Vice-President

Former minister, Mayor of Issy-les-Moulineaux, Vice-President of T3, Vice-President of the Metropolis of Greater Paris

#### SYCTOM'S DELEGATES



**Pierre-Christophe BAGUET** Mayor of Boulogne-Billancourt, President of T3, Departmental councillor of Les Hauts-

de-Seine, Metropolitan

councillor

### **T4** PARIS OUEST LA DÉFENSE





# SYCTOM'S DELEGATES Dominique

**ALTERNATES** 

LEBRUN Deputy Mayor of Saint-Cloud

Bernard

GAHNASSIA

Deputy Mayor of Puteaux



Pierre CHEVALIER

Municipal councillor of Ville-d'Avray

> Sophie DESCHIENS Deputy Mayor of Levallois-Perret, Regional councillor of Île-de-France

Amirouche

Deputy Mayor of Suresnes

LAIDI

SYCTOM'S DELEGATES



Jean-Christophe FROMANTIN Mayor of



Norredine IZNASNI Municipal councillor of Nanterre

#### SYCTOM'S BOARD MEMBER Éric CESARI



Deputy Mayor of Jean-François Courbevoie. DRANSART Vice-President Deputy Mayor of of the Metropolis Garenne-Colombes of Greater Paris

### **T5** ► BOUCLE NORD DE SEINE

#### SYCTOM'S BOARD MEMBERS



**AITERNATES** 

Mayor of Colombes, Vice-President of T5. Departmental councillor of Les Hauts-de-Seine, Met-



Olivier MFRIOT Deputy Mayor of Gennevilliers Recording secretary

> Mohamed MAAZOUZI Deputy Mayor of Villeneuve-la-Garenne

councillor

Marie-Do

AESCHLIMANN

Deputy Mayor

of Asnières-sur-

Seine, Regional

of Île-de-France

Samuel METIAS Deputy Mayor of Colombes

councillor of Villeneuvela-Garenne

Deputy Mayor of Asnières-sur-Seine

Patrice PINARD Deputy Mayor of Clichyla-Garenne

Khaled KHALDI

Deputy

Mayor of

Villetaneuse

ropolitan councillor

Deputy Mayor of Bois-Colombes

Anne-Christine JAUFFRET

SYCTOM'S DELEGATES

**Delphine HELLE** 

of Saint-Denis

Municipal

councillor

Frédéric SITBON





### **T6** PLAINE COMMUNE



Anne-Gabrielle CANTET

Deputy Mayor of Bois-Colombes



SYCTOM'S BOARD MEMBER



of Stains Anthony DAGUET

Deputy Mayor of Aubervilliers, Vice-President of T6



of Pierrefitte

Jean-Francois

Deputy Mayor

Vice-President of T7

BAILLON

of Sevran

William DELANNOY

Dominique CARRE Deputy Mayor

Jean-Francois MONINO Deputy Mayor of Aubervilliers

**Denis REDON** Municipal councillor of Épinay-sur-Seine

Christophe ROSE Municipal councillor of Île-Saint-Denis

Michel HOEN

councillor of

La Courneuve

Municipal

Laurent RUSSIER Mayor of Saint-Denis

#### T7 > PARIS TERRES D'ENVOL

#### SYCTOM'S VICE-PRESIDENT



Michel ADAM

Deputy Mayor of Dugny

Fouad EL KOURADI 14th Vice-President Deputy mayor of

Aulnay-sous-Bois **ALTERNATES** 



Denis DESRUMAUX

SYCTOM'S DELEGATES

Municipal councillor of Bourget



Claude MARIOT

Madani ARDJOUNE Deputy Mayor of Tremblay-en-France, Vice-President of T7



Bernadette VANDENABELLE Municipal councillor of Drancy

Municipal councillor of Villepinte

**Thierry MEIGNEN** 

Mayor of Blanc-Mesnil

Regional councillor of Île-de-France



#### Alexis MARTIN Municipal councillor of Nanterre

Bertrand **PERCIE du SERT** Municipal councillor of Levallois-Perret

# Departmental Councillor of Les Hauts-de-Seine, Metropolitan councillor

Eric BERDOATI

Mayor of Saint-Cloud,



Neuilly-sur-Seine Vice-President of T4, Metropolitan councillor

### Bernard ROCHE Municipal councillor of Vanves

Joëlle SUEUR Deputy Mayor of Issy-les-Moulineaux

Deputy Mayor of Boulogne-Billancourt

**Christiane BARODY-WEISS** 

Vice-President of T3.

Metropolitan councillor

5th Vice-President

#### SYCTOM'S BOARD MEMBER



Hervé MARSEILLE Senator of Les Hauts-de-Seine, Municipal councillor of Meudon, Metropolitan councillor



# **ALTERNATES Christine BRUNEAU**

Florence de PAMPELONNE Deputy Mayor of Meudon

### **T8** EST ENSEMBLE

#### SYCTOM'S VICE-PRESIDENTS



#### **Corinne VALLS** 8th Vice-President

Mayor of Romainville, Vice-President of the Departmental Council of Seine-Saint-Denis, Metropolitan councillor

SYCTOM'S BOARD MEMBER



Marie-Rose HARENGER Municipal councillor of Noisy-le-Sec

### T9 GRAND PARIS GRAND EST

#### SYCTOM'S VICE-PRESIDENTS



Jean-Pierre BOYER 13th Vice-President Deputy Mayor of Rosny-sous-Bois



Christian LAGRANGE Delegate Municipal Councillor of Les Lilas,

Vice-President of T8



SYCTOM'S DELEGATES

Laurent

Deputy

**ALTERNATES** 

ALPHONSE

Municipal councillor of

Montreuil

Mireille

ABRAHAMS

Mayor of Montreuil

#### SYCTOM'S DELEGATES

Asma GASRI

Deputy Mayor

of Romainville



Jacques

CHAMPION

Romainville

Deputy Mayor of

Vice-President of T8

Laurent JAMET

Municipal coun-

cillor of Bagnolet



Hervé LEUCI

Municipal coun-

cillor of Bobigny

Livry-Gargan, Vice-President of T9, Metropolitan councillor





Michel RINGRESSI

Deputy Mayor

of Vaujours



Ludovic TORO

Mayor of Coubron,

Regional councillor

Laurent LAFON

Senator of









Sténhane

Deputy

Mayor of

Romainville

Olivier STERN

councillor of

Municipal

Les Lilas

WEISSELBERG

**AITERNATES Christine GAUTHIER** 

Deputy Mayor of Pavillons-sous-Bois

Deputy Mayor of Neuilly-Plaisance

### T10 ▶ PARIS EST MARNE & BOIS

#### SYCTOM'S VICE-PRESIDENTS



15th Vice-President Deputy Mayor of Maisons-Alfort

SYCTOM'S BOARD MEMBER

Florence CROCHETON Deputy Mayor of Saint-Mandé

**ALTERNATES** Éric

Francois MARTINACHE

Christian CAMBON Senator, Municipal BENSOUSSAN councillor of Saint-Maurice, Councillor of the Deputy Mayor of Vincennes Metropolis of Greater Paris

Samuel BESNARD

Deputy

of Cachan

Mavor

Alain GUETROT

Saint-Maurice

Deputy

Mayor of

Jean-Pierre CRON Deputy Mayor of Charenton-le-Pont

Thomas MURGIA Municipal councillor of Saint-Mandé

Stéphan SILVESTRE Municipal councillor of Joinville-le-Pont

Frédéric TURPIN Municipal councillor of Maisons-Alfort

### T12 GRAND-ORLY SEINE BIÈVRE

#### SYCTOM'S VICE-PRESIDENTS



Philippe BOUYSSOU 7th Vice-President Mayor of lvry-sur-Seine, Metropolitan

#### councillor SYCTOM'S DELEGATES



Stéphanie DAUMIN Mayor of Chevilly -Larue, Vice-President of T12, Metropolitan councillor, President of RIVED

Pascal REISSER Deputy Mayor of Kremlin-Bicêtre

Deputy Mayor of Valenton Bamadi SANOKHO Deputy Mayor of Gentilly



Romain ZAVALLONE Municipal councillor of lvry-sur-Seine

Françoise BAUD Mayor of Valenton, Metropolitan

Elisabeth HUSSON-LESPINASSE Municipal councillor of Gentilly

Ibrahima KONATE Municipal councillor of Vitrv-sur-Seine

SYCTOM'S BOARD MEMBER

Alain LIPIETZ of Villeiuif

Municipal councillor

**Robert ORUSCO** Municipal councillor of Cachan

Municipal councillor of Kremlin-Bicêtre

Jean-Emmanuel ROUGIER Municipal councillor

### **VERSAILLES GRAND PARC AGGLOMERATION COMMUNITY**

SYCTOM'S DELEGATES

#### SYCTOM'S VICE-PRESIDENTS



ALTERNATES

of Chesnay

Violaine CHARPENTIER

Municipal councillor

councillor

Philippe BRILLAULT 12th Vice-President Mayor of Chesnay, Departmental councillor of Les Yvelines



Frédéric HUCHELOUP

Deputy Mayor of Vélizy-Villacoublay



Marc TOURELLE

Mayor of Noisy-le-Roi



Luc WATTELLE Mayor of Bougival, Vice-President of the Versailles

Monique RAFFAELLI



of Vitrv-sur-Seine







Jorge CARVALHO





Deputy Mayor of Charenton-le-Pont, Vice-Pres-

appointment of a delegate to replace Gressier. deceased.

Jean-Jacques

Pending the

# SYCTOM'S IDENTITY CARD

### **OVERVIEW**

A public player committed to ecological transition, Syctom, the metropolitan agency for household waste, manages the treatment and recovery of household waste. Thus, it receives the waste steams collected by the local authorities and treats them. To this end, it has 10 treatment units and a network of waste reception centres.

### Created in 1984

- ► No. 1 EUROPEAN PUBLIC PLAYER
- Missions
  - Treatment and recovery of household waste
  - Prevention and awareness-building to promote reduction, sorting and recycling
  - Commitment to a circular economy

# ▶12 MEMBER TERRITORIES:

11 territories of the Metropolis of Greater Paris and the Versailles Grand Parc Agglomeration Community

- ▶ 85 ÎLE-DE-FRANCE MUNICIPALITIES in Syctom's territory
- ▶ 6 MILLION INHABITANTS i.e. nearly 10% of the French population
- ▶ **90** DELEGATES representing Syctom's member territories









#### ISSÉANE, ISSY-LES-MOULINEAUX

#### **Energy recovery units**

- Catchment area: 1.45 million inhabitants
- 469,257 tonnes incinerated in 2019
- Authorised capacity: 510,000 tonnes
- Operator: Issy Urbaser Energy (Urbaser)
- Selective collection sorting centre
- Catchment area: 700,000 inhabitants
- 22,794 tonnes received in 2019
- Operating capacity: 23,000 tonnes
- Operator: TSI (Suez)



#### IVRY/PARIS XIII

- **Energy recovery units**
- Catchment area: 1.4 million inhabitants
- 661,693 tonnes incinerated in 2019
- Authorised capacity: 730,000 tonnes
  - (350,000 tonnes for the new project, i.e. -50%)
- Operator: IP13 (Suez)
- Reconstruction by 2024
- Architectural design: AIA Life Designers



#### L'ÉTOILE VERTE, SAINT-OUEN-SUR-SEINE

#### **Energy recovery units**

- Catchment area: 1.45 million inhabitants
- 486,424 tonnes incinerated in 2019
- Authorised capacity: 650,000 tonnes
- Modernisation and urban integration works by 2024
- Operator: Dalkia Wastenergy



#### NANTERRE

Selective collection sorting centre

- Catchment area: 1.25 million inhabitants
- 28,562 tonnes received in 2019
- Operating capacity: 40,000 tonnes
- (capacity increased in the future to 65,000 tonnes)
- Operator: Trivalo 92 (Paprec Group)
- Closed for modernisation works



#### PARIS XV

- Selective collection sorting centre
- Catchment area: 740,000 inhabitants
- 5,284 tonnes received in 2019
- Operating capacity: 20,000 tonnes
- Adapted to the extension of sorting instructions to all packaging since October 2019
- Operator: XVéo (Veolia)



#### PARIS XVII

- Selective collection sorting centre
- Commissioned in 2019
- Catchment area: **900,000** inhabitants
- 20,699 tonnes received in 2019
- Operating capacity: 45,000 tonnes
- · Centre designed to sort all packaging and paper waste
- Operator: CNIM



#### ROMAINVILLE

- Selective collection sorting centre
- Catchment area: 1.3 million inhabitants
- 56,525 tonnes received in 2019
- Operating capacity: 53,000 tonnes
- · Sorting of plastic packaging with extended instructions and small metals since 2015 • Operator: Valoram (Urbaser)

Residual household waste transfer centre

• 392,689 tonnes received in 2019





#### SEVRAN

- Selective collection sorting centre Catchment area: 350,000 inhabitants
- 17,968 tonnes received in 2019
- Operating capacity: 20,000 tonnes
- · Sorting of plastic packaging as per extended instructions since 2012, modernised in 2014 and optimised for the extended packaging sorting instructions
- Operator: Ihol (Veolia)

# KEY FIGURES



#### **HOUSEHOLD PACKAGING AND PAPER**

**198,081** t treated in selective collection sorting centres. 187.070 t in 2018



**BULKY OBJECTS** 

231,422 t waste collected door-to-door, illegal dumps, and waste from technical services and treated in bulky objects sorting centres. 223,408 t in 2018

WASTE TREATMENT

# 2,339,731 t of waste treated by

Syctom in 2019 for **6 million** inhabitants



#### WASTE RECEPTION CENTRES

### **30,225** t

bulky objects and special household waste received in the 31 fixed and mobile waste reception centres. 26,827 t in 2018



**HOUSEHOLD WASTE** 

1,872,649 t

treated in incineration centres with energy recovery or, as a last resort, by landfilling\*. 1,899,271 t in 2018

**FOOD WASTE** 

#### 7,354 t

collected separately for composting or methanation. 5,000 t in 2018



**GLASS PACKAGING: 128,078** t were collected in Syctom's territory and channelled directly for recycling without going through the Syndicate's facilities. 125,734 t in 2018



# **HIGHLIGHTS**



### January

► 26/01 - 02/03 Syctom sponsors the "Paris Agreement" exhibition by street artist Bordalo II at the Mathgoth Gallery, 13<sup>th</sup> arr. of Paris.

▶ 24/01 The 1<sup>st</sup> green loan obtained for the sorting centre project in Paris XVII.



# February

▶ 08/02 Brune Poirson, Secretary of State to the Minister for Ecological and Inclusive Transition, visits the Meudon waste reception centre.

► 06/02 Technical interactions and experience sharing with the Monaco Minister for the Environment.

▶ **19/02** The Government entrusts Syctom with the coordination of a waste prevention and treatment plan.



### March

▶ **15/03** Launch of the "Syctom Waste Solidarity" call for projects at the Maison du Cambodge at the Cité Internationale Universitaire de Paris.

▶ 13-22/03 Campaign to build awareness on the sorting of food waste at the Saint-Quentin market in the 10<sup>th</sup> arr. of Paris.



# July

▶ **10/07** Launch of a shared territorial diagnosis, as part of the development of a waste prevention, collection, treatment coordination plan in Syctom's territory.

▶ 01/07 Meeting of the waste treatment syndicates of Île-de-France.



August

▶ **08-09/08** Visit of the Vice-Minister of Ecology, Geology and Resources of Kazakhstan, within the framework of a technical cooperation initiated following the Astana International Energy Exhibition.



September

▶ 12/09 Launch of the 8<sup>th</sup> edition of the DZD competition

on the theme of "Fight against food waste in the food service sector", in the presence of the sponsors François Pasteau, chef committed to an eco-responsible approach, and Germain Bourré, designer.

▶ 13-15/09 Participation in the Paris Design Week and in the "Jouer, bouger, bricoler, recycler" exhibition at Ground Control with the 14 finalist projects of the DZD 2019 competition.



### April

▶ 12/04 Internal technical seminar on climate change.

▶ 03/04 Favourable opinion for the Île-de-France regional waste prevention and management plan (PRPGD) (voted in November 2019).



May

• 07/05 After the site preparation phase at the end of 2018, launch of deep foundation works (piles and diaphragm walls) for the ERU in Ivry/Paris XIII.

▶ 23/05 Agreement on the Pasig River Rehabilitation Project (Philippines) between SIAAP, Syctom and Metro Manila.



### June

▶ 27/06 The Syndicate Committee unanimously votes the Great Challenge action plan and its 35 actions.

• 06/06 Inauguration of the sorting centre at Paris XVII.



### October

▶ **15/10** Reopening of the Paris XV sorting centre with its new process.

▶ 10/10 Syctom and the Syndicat Mixte du Département de l'Oise (SMDO) sign a waste treatment cooperation and optimisation agreement.



# November

▶ 27/11 National conference on household waste at the Maison de la Chimie on the theme, "Waste and climate: the challenges facing local authorities? "

▶ 07/11 Motion against the deposit system for recycling plastic bottles.

▶ 29/11 Syctom signs a partnership agreement with GRDF to convert bio-waste into renewable gas.



December

▶ 03/12 Syctom participates at COP25 in Madrid (Spain) with SIAAP and presents the Cométha project there.

Syctom is continuously modernising its industrial infrastructure, with the constant aim to better recycle and recover the tonnes of waste it treats each year. It follows a rationale of both anticipating the growing needs of its territory and complying with European laws and directives. In 2019, despite challenging social circumstances at the local and national level, and several operating incidents, its strategy aimed at performance and equipment capacity development enabled it to ensure the quality and continuity of the public service it has been entrusted with.

# PERFORMANCE AND EFFICIENCY

# **ON THE FRONT PAGE**

# THE RECONSTRUCTION OF THE IVRY/PARIS XIII **CENTRE MOVING ON THE RIGHT TRACK**

The Ivry/Paris XIII centre has kicked off its transformation. In 2024, the energy recovery unit will treat 350,000 tonnes of residual household waste (RHW) per year, i.e. half of the current tonnage, with a view to reducing waste with improved sorting and increased collection of bio-waste. This new facility will deliver increased environmental performance, making it a benchmark in France and Europe.



On my first visit, I was struck by this incredible collection of phenomena of transformation, which have one thing in common, namely that they are invisible to us. The goal of the High artistic and cultural quality (HQAC) approachis to invite a great diversity of artists to narrate and "translate" these phenomena of mutation to present them in their own unique way ".

Stefan SHANKLAND **Plastic artist** 

### Construction and activity in tandem

In line with the principle of the continuity of public service, the activity of the current plant will be maintained until 2024. In that year, the new unit will be commissioned while the old one will be dismantled.

The works were planned such that the Ivry/Paris XIII centre continues to treat the waste of the 1.4 million inhabitants in its territory and to supply the local heating network throughout the construction period. This presupposes meticulous planning: after the south building was demolished in early 2019, the equipment and technical rooms were relocated.

The foundation works then took place in two successive stages: drilling of the piles, from May to September, and casting of the retaining walls, during the summer.

For drilling, reinforced concrete piles were cast in 346 pits dug to a depth of 35 metres and filled with reinforced concrete to form the piles. Then the retaining walls were built. They are composed of metal reinforcements and concrete which delineate - up to 25 metres underground – the outlines of the underground part of the future facility. Following the foundation works, which represented a technical and organisational challenge in a constrained environment, the earthworks phase began in November 2019.

350,000 TONNES **OF HOUSEHOLD WASTE** PER YEAR. CAPACITY REDUCED BY HALF



The facades of the new ERU, with their stainless steel cladding with round holes punched out, will reflect the urban environment of this rapidly changing sector. More broadly, the architecture of the buildings will enhance the industrial identity of the site. Finally, the emphasis given to greenery will also contribute to the urban integration of this cutting-edge facility.

### An exemplary construction project

#### These operations were carried out with respect for the environment and with a concern for supporting local employment.

In terms of the environment, the companies comply with three standards: the "Green building site" charter, the "High Environmental Quality" approach and the "Environmental Quality" charter specific to the site. This three-fold framework aims to reduce the environmental impact of the site, for residents and workers. A group of "Sentinels", made up of local residents, is specifically responsible for monitoring these impacts.

Finally, local communication is ensured, via messages on the hoarding around the building site, news flashes and a dedicated website to keep the local residents informed. These measures are in line with the consultation carried out since 2003.

The site also leads by example through its commitment to support the employment of the local population: at least 50,000 working hours will thus be reserved for people in job integration programmes and at least as many for job seekers.



### Art and industry

#### The lvry/Paris XIII centre takes on a new look under the gaze of an artist and in the light of a collaborative project.

As a result of the consultations organised around the project, and at the request of the town of lvrysur-Seine, Syctom implemented a High artistic and cultural quality (HQAC) approach. Led since 2012 by the artist Stefan Shankland, it revolves around the concept of "Musée du Monde en Mutation" (MMM, Museum of the Changing World).

An artistic, cultural and educational project, the "MMM" will bring together a diverse gamut of perspectives and expertise to examine the phenomena of transformation, on an industrial and urban scale, and to give them an artistic expression. The "MMM" will allow local residents to take ownership of the project and showcase this changing environment.

#### ENVIRONMENTAL IMPACT CONTROL AT THE HEART OF THE PROJECT

The new energy recovery unit will deliver better environmental performance compared to the existing plant: decreased atmospheric emissions, greater control of odour and noise pollution, reduction in the volume of water withdrawn from the Seine and less traffic.

**1,400,000 INHABITANTS** IN THE CENTRE'S CATCHMENT AREA

**180,500** THIS IS THE NUMBER OF HOUSING-EQUIVALENTS THAT WERE HEATED THROUGH THE NEW FACILITY



Located in the heart of the ZAC Clichy-Batignolles, at the foot of the new Court of Paris, in the 17<sup>th</sup> arr., the Paris XVII sorting centre was inaugurated on 6 June 2019 by Brune Poirson, State Secretary to the Minister for Ecological and Inclusive Transition.

# 2019: SYCTOM PREPARES PROACTIVELY FOR THE EXTENSION **OF SORTING INSTRUCTIONS**

Two years before the 2022 deadline, stipulated by the law, Syctom has adapted its centres to better sort the waste from selective collection and optimise its recycling performance.

# Modernising the existing facilities

The extension of sorting instructions (ECT) to all plastic packaging, provided for by the 2015 French Law on Energy Transition for Green Growth, must be effective in 2022.

To meet this challenge, Syctom made a financial effort of  $\pounds 160$  million to modernise the equipment in its centres and strengthen security.

At the end of 2019, five of its six sorting centres had the capacity to accommodate the extension of sorting instructions. The Nanterre centre will be operational at the end of 2020: the building permit application was submitted in August 2019 and the design-buildoperate-maintenance contract was awarded in January 2019 to the joint-liability-only consortium, Paprec Group Coved Environnement.

The reopening of the Paris XV sorting centre in September 2019 was in this respect symbolic. Commissioned in 2011, this facility underwent 10 months of works to be able to sort "better" - optimise the recovery of recyclable materials according to the new instructions - and sort "more". Now capable of treating 10 tonnes per hour (compared to 6 previously) and 32,200 tonnes per year (60% more), the centre will prepare the waste from the selective collection of 740,000 Ile-de-France residents for recycling. For this, Paris XV has been equipped with a sorting chain that incorporates highperformance technologies for preparing the streams and carrying out the sorting. As for quality control agents, they are accommodated in cabins that meet the latest ergonomic standards. More generally, the safety and working conditions of agents have been

#### AN IN-DEPTH LOOK

Catherine BOUX

Deputy General Director for waste use and recovery



The year 2019 was marked by an increase of nearly 6% in tonnages from the collections of household packaging

**and paper.** This growth stems from the widespread implementation of the extended sorting instructions, which now apply to new plastics. It is also and above all the outcome of communication campaigns on simplified sorting practices, which local authorities deployed ahead of this extension. It is for this reason that Syctom launched a campaign on sorting practices in early 2020.

Apart from the growth in the volumes of new plastics collected, we also see an overall increase in selective collection, all materials combined. This is the proof that awareness-raising operations play an important role and that we must not relax our efforts. On the contrary, we need to keep sending reminders to the public, if we want to rope in new "sorters". There is still significant for improvement in selective collection.

The food waste stream also grew significantly, from 5,000 tonnes in 2018 to 7,350 tonnes in 2019. This is due to the incentive pricing policy pursued for two and a half years by Syctom with the local authorities. All of the territories have thus set up food waste collection from schools and/or markets, and to a lesser extent from households. Even if this remains marginal in terms of volume, the trend is clear and the outlook is encouraging, especially in schools ".

improved on the site through new fire protection and dust and noise control systems.

### A new centre inaugurated

# The new sorting centre in Paris XVII, built in the Batignolles eco-district, offers unrivalled industrial performance.

The use of the most advanced sorting technologies, including in particular the innovative Recyfilms<sup>®</sup> process - for treating plastic films - will guarantee the recovery of nearly 95% of the recyclable portion of the 45,000 tonnes of packaging and paper treated each year by the centre.

Built at a strategic location, close to the ring road, and not far from the ports of Gennevilliers and Clichy from which a third of the sorted materials will be evacuated, this largely automated centre has been treating the selective collection of nearly one million residents of 14 municipalities in Syctom's territory since June 2019.

### **E160 MILLION** WAS DEVOTED TO THE ADAPTATION AND EXTENSION OF SORTING CENTRES

### **Initial reports**

# While selective collection increased by 6% in 2019, the figures for the end of the year show an even stronger momentum.

Syctom recorded a 10% increase in selective collection in November 2019 compared to November 2018. The adaptation and modernisation of its industrial infrastructure will enable it to cope with this trend, which should be consolidated in the years to come, to reach the 65% recycling target set by law by 2025.

**70% THIS IS THE OVERALL INCREASE** IN THE SORTING CAPACITY OF SYCTOM CENTRES



The modernisation of the Paris XV centre with its new sorting process testifies to Syctom's financial effort to adapt its centres to the extension of sorting to all packaging and to substantially increase its overall sorting capacity.



Upgrades at the Saint-Ouen-sur-Seine centre for improved performance and urban integration

# MODERNISATION TO DRIVE **PERFORMANCE**

To reconcile industrial efficiency, environmental responsibility and working conditions, Syctom continued to renovate and safeguard its assets, streamlined its internal organisation and strengthened its external partnerships.

## In Saint-Ouen-sur-Seine, headway in resolving the flue gas issue

Commissioned in 1990, the energy recovery centre in Saint-Ouen-sur-Seine is going through a makeover. Three major projects are being undertaken simultaneously, even as the site continues to operate: replacement of the flue gas treatment system, water treatment and urban integration works. The objective is thus to improve its energy and environmental performance while ensuring the urban and landscape integration of this facility located in the heart of a district that has become residential.

In 2019, significant advances were made in the dry treatment of incineration flue gases, despite various delays and unexpected obstacles. The new system implemented in 2019 on a first incineration line will better capture the pollutants from the combustion of household waste and considerably reduce the plume of steam leaving the stacks. While this system will be extended to all incineration lines in 2021 and 2022, all of the works will be completed in Saint-Ouen-sur-Seine in early 2024, giving rise to a new generation centre, renamed Étoile Verte (Green Star).





The Isséane sorting centre will give way to a transfer centre for the collection of packaging and paper.

## In Issy-les-Moulineaux, the Isséane sorting centre is all set for an overhaul

#### Commissioned in 2008, the Isséane sorting centre is no longer suited to current needs.

To comply with the principle of proximity to the reception of collections, Syctom decided in 2018 to transform it into a transfer centre for the selective collection of packaging and paper, as well as food waste, for which source sorting will be mandatory from 2025. Once received at Isséane, the recoverable waste from the western part of Syctom's territory will be sent to other sorting and treatment centres.

#### WORKS AT ROMAINVILLE-BOBIGNY

Given the substantial investment amount and the long-term impacts on Syctom's finances, the President wanted the officials elected for the upcoming term of office to decide on initiating this investment.



### Top priority to working conditions and safety

# In 2019, Syctom continued to work towards continuous improvement and strengthening the safety and security in its centres.

Engaged since 2013 in a comprehensive process to verify the conformity of its centres to the European "Machinery" directive, Syctom successfully brought its facilities up to standard in 2019 at the sorting centres in Nanterre first, and then in Sevran, Romainville, Paris XV and Paris XVII; the lvry/ Paris XIII and Saint-Ouen-sur-Seine centres will be upgraded to comply with the standard in 2020.

In addition, the Syndicate stepped up the initiatives to improve safety at its facilities: standardisation and adaptation of personal protective equipment (PPE) for agents on-site, purchase of suitable and compliant equipment for working at height, secure access to sites, prevention of falls from dumping docks, fire detection and protection, and the implementation of a safety awareness plan for agents.

To develop and improve its safety culture, the Syndicate renewed its collaboration with the Institute for an Industrial Safety Culture (ICSI).

A Security mission was set up in September 2019, and a QHSE apprentice was recruited. This mission monitors incidents and accidents, manages safety protocols for the access of collectors to Syctom's centres, as well as builds awareness among drivers. Finally, in terms of its internal practices, Syctom initiated a process in 2019 to bring personal data management into compliance and ensure its security in accordance with the European requirements of the General Data Protection Regulation (GDPR).



Syctom follows a policy of continuous improvement of its facilities, in order to guarantee the reliability of the sites, prevent risks and ensure the safety of people.

# Internal organisation and partnerships guarantee the continuity of the public service

In addition to the work carried out on its sites, Syctom optimised the efficiency of its internal resources to ensure the quality and continuity of the public waste management service. In addition, it consolidated its partnerships with other Ile-de-France local authorities.

In May 2019, Syctom adopted a new organisation chart which endows its General Directorate of Services (DGS) with four deputy general directorates: the Deputy general directorate for waste use and recovery (DGAEVD), the General directorate for technical services (DGST), the Deputy general directorate for resources and means (DGARM) and the Deputy general directorate for mobilisation, public and territories (DGAMPT). Instituted in the wake of the Great Challenge meetings (see pages 26-27), this latter directorate oversees prevention and public awareness programmes as close as possible to the field. Syctom also implemented a code of ethics for its agents in 2019. This charter is in line with the legislative context of strengthening the accountability of public actors in terms of the fight against corruption and the affirmation of ethical rules to which public officials must adhere. Integrity, impartiality, dignity, neutrality and secularism constitute the core tenets of the charter. Internal training on these topics will be conducted in 2020. Finally, Syctom experimented with teleworking with 15 people in 2019. With this first step yielding a positive assessment, a ramp-up phase was initiated in 2020, with 45 agents.

Backed by this efficient organisation and the expertise of its teams, Syctom was able to overcome various hurdles in 2019 (delays in site deliveries, unplanned outages, strikes at the end of the year) and thus guarantee the quality and the continuity of the public waste treatment service. The cooperative relations it maintains with several other metropolitan syndicates also played a decisive role in ensuring that the difficulties encountered were managed responsively and efficiently. A case in point is the implementation of the agreement signed in October 2019 with the Syndicat Mixte du Département de l'Oise (SMDO), under which the two parties promote a sustainable approach of cooperation and pooling of their means and resources.

#### A PERFORMANCE-DRIVEN ORGANISATION

Syctom employs 129 technical and administrative public agents with a wide range of know-how. Organised into multidisciplinary teams, they are mobilised on a daily basis to guarantee the efficiency and quality of the public waste treatment service.



Recognised by public authorities as one of the key leaders in waste treatment, Syctom resolutely defended the priorities of the sector during the legislative debates of 2019. In line with its national positions, it also consolidated and continued its actions in the field to support local authorities and residents in the environmental transition that will be initiated by a renewed management of waste sorting.

# PROXIMITY AND MOBILISATION

# **ON THE FRONT PAGE**

# WORKING TOGETHER TO TAKE ON **THE GREAT CHALLENGE**

Convinced that the key to success in waste management is coordination, Syctom launched an unprecedented collective initiative at the start of the year: the Great Challenge brings together all the stakeholders - territories, associations, representatives of household waste producers or bulk waste producers, players involved in the treatment - to achieve ambitious objectives in terms of waste reduction and improvement of sorting.



The objective is to design the blueprint for these future coordination plans. We know the situation well and have thought about it a lot in full partnership with the local authorities. It is in fact essential to better structure the link between prevention, collection and treatment ".

Thierry LELEU State councillor and former prefect of Val-de-Marne Guarantor of the implementation of the Coordination plan

# A prevention-oriented collective initiative

# At the start of 2019, nearly 200 stakeholders took part in the first phase of the Great Challenge: a collegial reflection based on a participatory approach.

After six months of joint constructive work, the participants issued 203 recommendations which resulted in a 35-point action plan adopted by the Syndicate Committee on 27 June 2019. Organised into 7 focus areas, it sets out proposals of varying magnitude and scope, which sometimes translate into very concrete measures or clear medium-to-long term policy directions.

They include education, training, communication and advocacy initiatives. To foster a change in habits, the Great Challenge focuses on prevention and awareness-building and provides for experimental actions carried out with the support of behavioural experts on crosscutting themes (health, climate, food, etc.), in particular in partnership with pilot schools.

With its solid footing in the "grassroots" and the unprecedented commitment of its stakeholders, the Great Challenge is fully in line with the mission entrusted to Syctom by the Government and the Regional Council of Île-de-France: to experiment with an operational coordination plan for the prevention, collection and treatment of waste in the territory.

200 PARTICIPANTS









All the stakeholders (producers and distributors, donors, recycling professionals, associations, local elected representatives) met in workshops and proposed 203 recommendations.

### Concrete results already

The collective implementation of the Great Challenge began from the second half of 2019, in particular with the development of a shared territorial diagnosis.

This was carried out with the local authorities in order to identify the coordination drivers to be deployed. Another outcome of the Great Challenge in 2019 was a charter of good practices dedicated to waste collection and treatment. The product of a working group led by Syctom with its member local authorities, this charter aims to clarify the role and commitments of each stakeholder, as well as to enforce regulations, and in particular the hierarchy of waste treatment methods.



### New project, new organisation

Syctom was able to adapt in order to stimulate and implement this collective approach on a territorial scale.

Syctom thus set up the Deputy general directorate for mobilisation, public and territories (DGAMPT) in 2019. This new department in charge of communication and support policies to promote prevention and awareness of waste sorting manages the deployment of the Great Challenge action plan, including its institutional relations. In terms of governance, the Syndicate Committee, which met on 7 November, decided to activate the Advisory committee for local public services (CCSPL). This forum for dialogue and consultation, which brings together the Syndicate Committee members and the representatives of five associations, will monitor the proper implementation and monitoring as set out in the action plan.



After giving an impetus to the Great Challenge and coordinating an innovative co-construction approach, Syctom voted an ambitious action plan on 27 June 2019 to better prevent and manage waste.

# Soyons courageux. Arrêtons la production des bouteilles en plastique.

Plastiques à usage unique. La consigne n'est pas la solution.

Les Collectivités locales, actrices du Service public de gestion des déchets.

Press campaign against the introduction of a deposit system for plastic bottle recycling.

# AN INFLUENTIAL VOICE IN DEBATES

In 2019, Syctom clearly defended its point of view during the preparation of the Anti-waste law for a circular economy, during the discussions on the Finance law for 2020 and at the European level.

# The deposit system is not the solution

In a joint statement, backed by a press campaign, Syctom joined forces with several local authorities demanding the withdrawal of the deposit system for plastic bottle recycling.

Syctom has been long aware of the urgent need to reduce waste production. After contributing in 2018 to the development of the Regional waste prevention and management plan (PRPGD) and the Roadmap for the circular economy (FREC), it actively participated in parliamentary discussions in 2019 prior to the vote on the Anti-waste law for a circular economy.

With a view to implement the FREC in France and to transpose the directives of the European Circular Economy Package, this new law raised the controversial question of the deposit system for plastic bottle recycling.

Syctom and the local authorities, which signed a joint declaration against the introduction of such a system, argued that it ran counter to the momentum generated in favour of a more exhaustive sorting of waste. Their efforts have finally borne fruit. The deposit for plastic bottles has in fact been postponed to 2023, giving local authorities time to prove their ability to meet European recycling targets, without the deposit system.

Thus, this debate obscured the excellent content of this innovative law, adopted in January 2020; it foreshadows significant advances, particularly in terms of prevention, the fight against illegal dumping, consumer information and awareness for responsible purchasing, which Syctom will implement with great enthusiasm.

#### AN IN-DEPTH LOOK

Martial LORENZO

General director of services, Syctom

#### Syctom's mission is to ensure the continuity of the public waste treatment service and to promote

**resource savings.** But the effort required to achieve this two-fold objective must be viable and consistent, collectively and individually. But in 2019 we had to face several challenges. The massive increase in the General tax on polluting activities (TGAP), applied uniformly to all stakeholders, struck us as an unfair decision. While Syctom has invested – and incurred debts – to adapt its industrial infrastructure to the challenges of environmental transition, it is being taxed in the same way as some low achievers. It's a double penalty! We also see the prospect of a deposit for plastic bottles as a very bad sign. Not only does this system go against the grain of the enormous investments made by local authorities to deploy selective sorting, but it will also disrupt the habits acquired by citizens, who are gradually adopting new sorting practices. Finally, opting for the deposit of plastic bottles is tantamount to granting a polluting permit to manufacturers, who on the contrary must be encouraged to curb waste production.

Hiking the TGAP and implementing the deposit system are actually quick-fix solutions, which will lead to an almost unbearable increase in the cost of waste treatment ".

# Advocating incentive taxation rather than punitive taxation

#### The year 2019 was marked by the emergence of a series of very restrictive regulatory measures, including a new tax framework imposed by the Finance law for 2020.

As adapting taxation to encourage waste recovery is one of the objectives of the Roadmap for Circular Economy (FREC), the French Parliament, in its Finance law for 2020, voted to increase tariffs for the "Waste" component of the General tax on polluting activities (TGAP) and to apply the same rate of €15 per tonne incinerated to all players, without distinction, from 2022 onwards. For Syctom, which benefited until now from a TGAP reduced to €3 per tonne due to its virtuous approach to the environment, this new tax path will weigh heavily on its budget: the additional effort required is estimated at €33.50 million per year. The Syndicate vigorously challenged this reform, whose punitive rationale does not take into account the efforts and investments made by local authorities that have long been committed to the circular economy and sustainable waste management. It also drew the attention of the public authorities to the repercussions of this measure, which will affect French people subject to the TEOM (the household waste removal tax).

# Syctom's actions at the European level

Along with its advocacy campaigns on the national scene, Syctom also takes action at the European level to influence discussions related to its sector. At the European level, Syctom is lobbying with the European Union (EU) to advance the issue of waste treatment and influence regulations. It regularly responds to online consultations offered by the EU to gather the views of the stakeholders. It also publishes "position papers" intended to enrich the work of committee rapporteurs.



The impetus given by the local authorities made it possible to increase the tonnages of selective sorting.

OBJECTIVES OF THE ANTI-WASTE LAW FOR A CIRCULAR ECONOMY







Trader at the Saint-Quentin market in Paris, participating in the food waste experiment.

# CONTINUED GRASSROOTS PRESENCE

Syctom stepped up its actions with its member local authorities and the general public to implement the extension of sorting instructions, deploy new types of collection and sorting and pursue its regular preventive initiatives.

# Promoting the sorting of packaging

Syctom offered various aid mechanisms to local authorities, which are at the forefront in the implementation of the extension of sorting instructions (ECT).

Apart from the investments made to adapt its sorting centres, Syctom reinforced its support in the field in various ways: technical and financial assistance, help in organising collection and local awarenessraising actions.

A €3.5 million package was released to deploy teams of eco-facilitators responsible for fostering the implementation of ECT, in particular through doorto-door awareness campaigns.





Syctom stepped up its action on the ground, particularly through awareness campaigns led by eco-facilitators.

# Experimenting with food waste collection and treatment

# After household paper and packaging, food waste is also sorted now.

The growth of the food waste stream, for which source sorting will be compulsory in 2025, is an increasingly pressing issue. To prepare for this, Syctom has been strongly involved alongside its members to experiment with several systems since 2017, for example supporting operations to raise the awareness of traders and door-to-door information campaigns. This resulted in the collection of nearly 7,350 tonnes of food waste in 2019, which was recycled into biogas or converted into natural fertilisers. By the end of 2019, all of the Syctom member territories had participated in at least one experimental food waste collection system. It is now time to transform these experiments and define an organisation sustainable over the long term.

In addition, Syctom launched a call for projects in 2018 to spur the emergence of local initiatives for treating food waste in markets, in public catering services and in households. Four waste management microstructures thus received Syctom's financial support in 2019, in Valenton, Vitry-sur-Seine, Stains and Paris 19<sup>th</sup>. The innovative and socially responsible collection and treatment solutions they offer should make it possible to achieve an overall volume of 950 tonnes of food waste collected per year. This will contribute to the efforts undertaken by Syctom, which in 2019 recorded an increase of nearly 50% in the collection of bio-waste.



Food waste collection at the Versailles market.

### Taking action proactively

# Since the best waste is no waste, Syctom also takes initiative upstream of the chain.

Syctom deploys several preventive actions to reduce waste production at the source. A telling illustration is the DZD competition, organised in partnership with the Île-de-France Region and ADEME. It invites students and young graduates to create sustainable goods and services that limit waste production, and educates as many people as possible about waste prevention and eco-design.

Launched in September 2019, the 2020 competition was dedicated to food waste in the food service sector and was sponsored by designer Germain Bourré and chef François Pasteau. And the outcome was 14 finalists and support for implementing projects with two partners: the National Group of Independent businesses in the Hotel and Restaurant industry (GNI SYNHORCAT) and SEMMARIS, the company managing the Rungis market.

Developing proximity composting is also one of the priorities of the Syndicate, which provides local authorities with human and technical resources: supplying and installing composters, training local intermediaries (individuals, community agents, associations, donors, teachers) and master composters responsible for launching and monitoring shared composting sites or distributing tools for the general public (flyers, practical guides, posters, etc.).

Finally, Syctom supports local prevention initiatives, which it does not lead directly. Through its support

plan, it funds numerous projects each year that aim to reduce waste volumes. In 2019, Syctom thus awarded  $\in$ 3,320,885 in grants, which benefited 66 local projects.

### Education in the grassroots

Opening the doors of its centres and reaching out to meet the public: Syctom makes education one of the main levers for raising awareness about waste reduction and sorting.

In 2019, Syctom launched a teaching kit for schools to educate young people about sorting food waste: playful mascots, activity sheets, dictations on the theme of waste, memory games, resource kit, etc. These diverse tools meet the needs of different age groups, from elementary to high school.

Awareness doesn't go on vacation! Around forty Syctom eco-facilitators also organised summer events for the general public to develop ecofriendly practices during the summer of 2019, on the banks of the Ourcq canal, in Aulnay-sous-Bois and on the busiest sites in the capital.

This involved, for example, encouraging the public to use the containers in the main walkways of parks and reminding users about sorting instructions, both at home and outside. More broadly, these informal interactions on the field allow ecofacilitators to make people aware of the stakes of a more responsible consumption: limiting food waste by buying less but more often, preferring reusable to disposable products and bulk to packaged products.



In order to be effective, waste prevention actions and the

improvement of sorting practices require proximity, knowledge of the actual situation in the territories and agility in the projects. We carry forward this coordinated dynamics of stakeholders and foster the sharing of experiences with our members ".



Marie-Pierre MARTINET

Deputy general directorate for mobilisation, public and territories
Syctom also familiarises residents with the issues of waste management and preservation of the planet's resources by opening the doors of its centres, in particular in Isséane (Issy-les-Moulineaux) and the new sorting centre in Paris XVII. In November 2019, on the occasion of European Waste Reduction Week, around 750 people went behind the scenes of the public waste treatment and recovery service, which is usually closed to the general public.





**66 LOCAL PROJECTS** SUPPORTED BY SYCTOM, I.E. SUBSIDIES WORTH €3,320,885 AWARDED



Like every year, Syctom opened the doors of its facilities to the general public.

#### 

To connect with new audiences, Syctom created its Facebook, Twitter, LinkedIn and Instagram accounts in September 2019 and appointed a digital communication manager. This strategy aims to diversify its messages to better reach out to the target audiences and to share local initiatives more widely as examples of citizen involvement. Fully in line with Focus area 3 of the Great Challenge action plan, dedicated to communication, social networks constitute a new channel for a wider dissemination of Syctom's prevention and awareness-raising actions.

In a volatile context, Syctom redoubled its efforts to embody a responsible and dynamic public service. Through its daily activities as well as through its future projects, within its territory and beyond, the Syndicate intends to develop innovation and disseminate its expertise, thus actively contributing to energy transition.

# LEADING BY EXAMPLE AND INNOVATION

## **ON THE FRONT PAGE**

# **COMÉTHA:** INNOVATION TO FUEL RENEWABLE ENERGIES

The Cométha project, born out of the strong desire of Syctom and SIAAP to promote significant synergies and jointly devise technical solutions for the treatment and production of renewable energies, continues to make great strides forward. This innovation partnership, which unites the two public players in Ile-de-France, boosts research and the combination of innovative and tailor-made technologies for the benefit of public action.

#### Major energy challenges

The two operators have chosen to join forces to conduct a programme to jointly treat their organic resources with high energy potential, while their return to the soil after material recovery is becoming increasingly complicated.

The problem, for Syctom, is the residual organic fraction from household waste, which remains even after setting up the separate collection of bio-waste, and for SIAAP, it is the sludge from wastewater treatment. The Cométha project aims to maximise the conversion of this organic material and thus produce renewable and recovered energy in the form of biomethane. This will further strengthen its contribution to energy transition.

#### **Boosting synergies**

#### To meet their expectations in terms of innovation, Syctom and SIAAP embarked on a process designed to encourage the emergence of new solutions: innovation partnership.

This creates an environment conducive to research and development, for the benefit of all. Syctom and SIAAP chose to carry out a 3-phase project, including a selection stage. At the end of phase 1 of R&D, the outcome of the partnership was positive and concretely demonstrated

4 CONTRACTING GROUPS SELECTED IN 2017 15 LABORATORIES INVOLVED



The Cométha innovation partnership

experiments with a combination of methanation and pyrogasification to eliminate the need for return to the soil, a crucial issue in Syctom's territory. ADEME is following this programme with interest, which pushes back the limits of the possible ".

Michel GIORIA Regional Director of ADEME Île-de-France



the relevance of comethanation, since the expected performance was exceeded. In December 2019, two contracting groups were selected and phase 2 of the project was launched, which will consist in concretely testing the solutions devised in phase 1.

At the same time, Syctom established a partnership with GRTgaz in 2019, in order to create a sharing of expertise. One of the objectives of this cooperation will be to analyse the technical feasibility of using pyrogasification as a solution for recovering digestates from comethanation. With the support of its research and innovation centre, GRTgaz will provide Syctom with its expertise in the various renewable gas production technologies and in the assessment of the quality of the gases obtained.

#### Inspiring internationally

This unique project is arousing interest far beyond the French borders. On December 3, Syctom presented it during the COP25 in Madrid.

Cométha is also featured in the Booklet of concrete solutions developed to accelerate the achievement of the objectives of the Paris Agreement, published by the Partenariat Français pour l'Eau (PFE). Its presence in this book concretely illustrates how the combined handling of water sanitation and solid waste treatment issues is relevant to achieving Sustainable Development Goals (SDGs) 5, 6 and 11 of the 2030 Agenda.







Technical day organised by Syctom and SIAAP on 14 November 2019 in Paris on the Cométha project.



Located in the heart of the Batignolles district in a dense urban area, the Paris XVII sorting centre has been successfully integrated with a suitable organisation by limiting its environmental impact.

# COMMITTED ON A DAILY BASIS, ON ALL FRONTS

Syctom's commitment as a responsible player translates, day after day, into concrete measures aimed at drastically limiting the environmental impact of its centres, to guarantee their seamless urban integration and to optimise its own organisation.

#### On the path to carbon neutrality

As a public service operator, Syctom fulfils its responsibility through an ambitious decarbonisation strategy, in line with the national low carbon strategy.

Committed to this issue for several years, Syctom intends to put an end to landfilling – which represents the largest share of greenhouse gas (GHG) emissions in waste management in Europe – by 2025. It strives to optimise the performance and outputs of its energy recovery units.

Since 2014, Syctom has calculated its carbon footprint<sup>®</sup> every year. To this end, it acquired a management tool so as to analyse its annual emissions in detail, according to the methodology defined by ADEME. These assessments carried out since 2014, as well as the prospective calculations for 2025 and 2031, are pointing in the direction of carbon neutrality: they show that the avoided emissions will offset the emissions generated. Syctom is also actively involved in cross-functional R&D projects, aiming to further limit GHG emissions in the near future and optimise carbon recovery.

Sorting of materials according to their nature for recovery





Aerial view of the sorting centre in Paris XVII and its photovoltaic panels

With this decarbonisation strategy, Syctom is actively contributing to energy transition.

#### Limiting impacts in the vicinity of the sites

#### Working in an ultra-dense urban area, Syctom ensures that its facilities are integrated into their environment.

Architectural and landscaping work is carried out to enhance every renovation or construction project to meet the challenge of a factory in the city.

This is evident in the new centre in Paris XVII, inaugurated on 6 June 2019, in the heart of an eco-district with ambitious environmental objectives. Blending harmoniously with the neighbouring buildings, the site presents a highquality architectural design, showcasing renewable construction materials such as wood. Sprawled across 2,400 m<sup>2</sup>, its green roofs feature hanging gardens and terraces.

Urban integration also requires a careful prevention of nuisances around the centres. AT Paris XVII, the facade underwent a specific acoustic treatment to avoid the reverberation of traffic noise. The sites in lvry/Paris XIII and Saint-Ouen-sur-Seine will benefit from an innovative system of acoustic measurements, thanks to a partnership with Bruitparif. In Saint-Ouen-sur-Seine, Syctom also intends to control odour nuisance. The diagnosis already initiated continued in 2019 and should pave the way for setting up a network of sensors in summer 2020 in order to identify the sources of odours perceived by residents and for continuous monitoring in the vicinity of the site.

# From construction to operation

# Syctom strives to reduce its impact on the environment as much as possible, in its daily activity but also by modernising its facilities.

In this respect, the works carried out in its centres meet the "Green construction site" charter. From the design phase, priority is given to materials from reused raw materials and the use of biodegradable products, while outgoing waste is recycled as much as possible. On the sites in operation, Syctom now intends to develop biodiversity, through green roofing and the differentiated management of its green spaces. FOR example, a "Zero phyto" (zero plant protection products) commitment was made and new plant varieties that consume less water were selected, along with suitable watering techniques. This initiative also includes installing "insect hotels" and birdhouses.



# Continuous and multimodal monitoring

# Syctom discharges its responsibility also through a proactive policy of monitoring the impacts of its centres.

Atmospheric emissions from ERUs are analysed continuously, using sensors placed in the stacks. In addition to the regulatory checks carried out by the operator, the Syndicate also calls on an independent body which performs two additional inspections per year. As in previous years, the results of the measurement campaigns in 2019 were below the authorised thresholds, thereby proving the efficiency of the incineration flue gas purification processes. At the same time, Syctom carries out checks in the environment. Thus, once a year, analyses of dioxins/ furans and heavy metals are carried out in the rainwater collected over a period of 2 months. The conclusions of these measurements are very positive and demonstrate the effectiveness of the technical measures implemented.

Along with these efforts, Syctom carries out biomonitoring actions using mosses and lichens collected near the sites. These bio-indicators provide a continuous analysis of the exposure situation. This year, the Syndicate also wanted to complete its system by installing beehives, in order to check the level of accumulation of heavy metals and dioxins in bees.



Beehives installed on the planted terraces of the Paris XV centre to allow biodiversity to thrive.

## Rigour and innovation in financial matters

To take on the challenges of waste reduction and meet French and European regulatory constraints, Syctom initiated an ambitious investment process.

Its multi-year programme represents a sum of €1.4 billion over the period 2019-2028. In addition to this high level of commitment, there are strong constraints linked to changes in the legal context. These challenges more than ever demands budgetary restraint from Syctom to ensure its financial health and sustainability.

The long-term A+ rating awarded by SP Global Ratings at the end of the year demonstrates the strength and reliability of Syctom's strategy. It also reflects the confidence of financial institutions in Syctom's ability to implement its investment policy, while containing its debt.

## Modern and more transparent governance

# Syctom's desire to set an example is also reflected internally: it optimised certain procedures and formalised its ethical commitments in 2019.

In response to legal developments in terms of transparency in public life, Syctom wished to create a simple and accessible code of ethics for the use of all its agents. New initiatives such as organising information sessions or drafting a public purchasing charter are also on the cards. Convinced that innovation must also pervade the field of management, the Syndicate continued its process of upgrading the financial processes related to public procurement. A pioneer in this field, Syctom took a further step forward by receiving dematerialised invoices exclusively.

> **64** RAINWATER COLLECTION GAUGES LOCATED NEAR THE THREE ERUS FOR ANALYSING ATMOSPHERIC FALLOUT

#### Opting for green loans

# Loans are Syctom's main resource for meeting its financing needs: they represented €243 million in 2019.

By soliciting institutions that support projects with high environmental value, Syctom engages in green and sustainable financing, in line with the achievement of UN Sustainable Development Goals (SDGs) 9, 11 and 12.

The loan contracted this year from the European Investment Bank turned this ambition into a reality: the multiannual package of €230 million covering the period 2019-2023 will contribute to the construction of the lvry/Paris XIII centre. Along the same lines, the Syndicate also signed a partnership agreement for 2020-2022 with Banque des Territoires, with the aim of promoting projects around "sustainable city" and innovation.



Signature of a partnership agreement with Banque des Territoires during the Salon des Maires et des Collectivités.

#### FIRST "GREEN LOAN" REPORT

Through its activity reports, Syctom is committed to making available to the public precise information concerning the allocation, performance and environmental impacts of each green loan taken out. The first loan, for an amount of €30 million, contracted with Société Générale, enabled the construction and commissioning of the Paris XVII sorting centre in 2019. With high capacity and adapted to the new extended sorting instructions, this centre was found suitable for contributing to the objectives of prevention, pollution control and climate change mitigation. In terms of environmental impacts, the initial results are promising (see 2018 carbon footprint<sup>®</sup> presented on page 11). However, we will have to wait a full year of operation to assess the achievement of the performance indicators set by this green loan.

Transparency and the quality of the information shared have always characterised Syctom's financial strategy. The financial rating process initiated at the end of 2018, unprecedented for a large public syndicate, illustrates our desire to guarantee, both to elected representatives and to financial markets, the sustainability of our ambitious investment plan (€1.2 billion over the period of 2020-2028) ".

Laurent GONZALEZ Deputy director general for resources and means



River transport is given priority over road transport wherever possible.

# INNOVATING TODAY **TO BUILD OUR TOMORROW**

Committed to ecological transition and the deployment of a circular economy, Syctom gives priority to innovation. It also intends to promote its expertise beyond its territory and help put the issue of waste at the heart of international debate.

#### **Recovering organic matter**

# Syctom has been involved for several years in research programmes focused on the recovery of organic waste.

In view of the significant progress made in the collection of food waste, Syctom wishes to be fully equipped to make optimal use of this mine of organic matter. Methanation is a way forward, contributing to the target of 7 terawatt-hour (TWh) of renewable gas produced in 2030, set by the Île-de-France region. A first innovative project is already in the pipeline, in the port of Gennevilliers, to create a methanation unit by 2024. Led by Syctom, along with Sigeif (the Île-de-France gas and electricity syndicate), this project would make it possible to treat up to 50,000 tonnes of bio-waste per year and produce biogas based on the award of concessions. On 29 November, Syctom also signed a partnership agreement with the gas network operator (GRDF) aimed at developing biomethane production in the Ile-de-France region.

# Innovating to better capture CO<sub>2</sub>

# Reusing treatment residues of all kinds is also one of Syctom's ambitions.

Since 2015, the Syndicate has been involved in a research and development project relating to the capture and recovery of the carbon contained in incineration flue gases. At the Saint-Ouen-sur-Seine site, extensive work is thus being carried

#### AN IN-DEPTH LOOK

**Pierre HIRTZBERGER** General Director of technical services

#### Although the waste management activity hardly contributes to climate change, with 5% of total GHG emissions

# at European level, it is an issue that we take particularly seriously.

We are already ahead of the changes in regulations in this area. There is, as of now, no unified legal framework taking into account both circular economy obligations and the fight against climate change. Rather, public waste management policies have been designed to reduce and limit pollution in general (water, air, soil, etc.) and do not take the issue of GHG emissions into account. Our prospective studies have confirmed that our waste management strategy is climate-compatible, which is excellent news and a fundamental point. By 2031, we will have almost achieved carbon neutrality, since the avoided emissions will fully offset the direct emissions from our activity. Concretely, every time we divert a tonne of plastics from incineration, that tonne "counts" twice. It decreases direct emissions and, because it is recovered, it avoids the production of virgin petroleum-based plastics by other sectors.

It is on the strength of this carbon-neutrality oriented strategy, promoting recycling and limiting landfilling, that we intend to make a contribution both to the Regional waste prevention and management plan (PRPGD) and to the Regional climate, air and energy plan (SRCAE) ".

out to make  $CO_2$  capture possible and allow the accelerated cultivation of microalgae which is then converted into biomaterial. After an initial phase of selecting algal strains, the research consortium focused, between 2018 and 2019, on the design of bioreactors necessary to produce microorganisms.

The first prototypes were installed in Almería (Spain) to be tested by the University of Almería, one of the consortium partners. Also keen to find new outlets for incineration residues, Syctom remains committed to the research agreement for the recovery of bottom ash, in partnership with the Île-de-France region.

## **Optimised river transport**

#### To reduce GHG emissions, Syctom is also studying the modes of transporting waste. Navigation is an interesting solution.

In fact, a river convoy of 5,000 tonnes is equivalent to 250 fewer trucks on the roads, and emits 3 to 4 times less  $CO_2$  on average (source: French Ministry of Ecological and Inclusive Transition). Already used by Syctom to transport 245,300 tonnes of materials per year, water transport must however be optimised. To this end, the Syndicate has been working alongside its partners, through the H2SHIPS project. The objective of this programme is to test the use of hydrogen as a new fuel, for lower  $CO_2$ emissions and reduced emissions of fine particles. Syctom will play an active role in the pilot operation in France, as it will carry out a feasibility study of a hydrogen engine for the river transport of waste. The Syndicate is also committed to optimising the transport of its goods through a network approach. It joined the signatories of the ASTRID project (Axe Seine Transferts Régionaux Innovants des Déchets) aimed at developing a multi-actor logistics chain dedicated to the Seine route. Winner of a call for expression of interest (CEI), the study project brings together ADEME, Government services, Île-de-France and Haute-Normandie. In 2019, the logistics model was tested aimed at bulking up the flows, before loading onto large boats navigating on the Paris-Normandy route.



Use of microalgae to capture the CO<sub>2</sub> contained in incineration flue gases.

**50,000 TONNES OF BIOWASTE** RECOVERED PER YEAR BY 2024, FOR THE PROJECT TO BUILD A METHANATION UNIT ON THE PORT DE GENNEVILLIERS, WITH SIGEIF

#### Innovation, health and society

Engaged in a dynamic industrial and territorial ecology, Syctom plays its full part in building a sustainable city, respectful of its environment and its inhabitants.

Actively involved in its territory, it also works in collaboration with external partners. The Syndicate thus joined forces with the "Urban innovation districts", whose second call for experiments was launched by Paris&Co's Urban Lab for the "Chapelle-S" sector on 4 April 2019. The purpose of this programme is to promote the emergence and implementation of projects that enhance the attractiveness of a civic, eco-smart city.

Syctom also initiated a collaboration in 2019 with the Institut Sapiens, a think tank whose mission is to study and promote new forms of ecosystems. The purpose of this three-year partnership is to set up a think tank on waste, particularly in the human, social and behavioural sciences. Syctom also partners a study conducted by the Autism Foundation, which explores the possible links between autism and heavy metals. This study released its preliminary results in 2019. An in-depth analysis of data from an unpublished bibliographic survey showed that the current state of knowledge is not sufficient to establish a conclusive link between autism and heavy metals. Research will therefore continue with the creation of a multidisciplinary group unique in France, associating laboratories specialising in trace metals as well as a new analysis strategy on milk teeth.

# Bolstering our support worldwide

Already involved since 2015 in an international solidarity programme within the framework of 1% waste, Syctom wanted to structure the selection of projects that it supports.

On 15 March 2019, the Syndicate launched its first call for "Waste Solidarity" projects, during a conference at the Cité internationale universitaire de Paris. The objective is both to involve the member local authorities to a greater extent and to coordinate and pool actions to increase their effectiveness. At the end of 2019, seven projects were selected, each with a grant of between  $\notin$ 40.000 and  $\notin$ 140.000.

At the same time, Syctom carried out field reviews of the projects that it supports already. In this capacity, Jacques Gautier took part in a mission to Madagascar in May, accompanied by four elected members of the Solidarity and International Cooperation Committee. The delegation was able to observe the progress made by the three projects in the country, identify the next steps and fine-tune the support arrangements. Again in this rationale of optimisation and continuous improvement, Syctom launched an evaluation of the effectiveness of its entire programme and entrusted this analysis to the association, Prospective et Coopération. This will allow Syctom to benefit from an external viewpoint on the action taken since 2015 in terms of cooperation, in order to identify areas for improvement to be proposed for the upcoming term of office.

for launching the "Waste Solidarity" call for projects, on 15 March at the Maison du Cambodge of the Cité Internationale Universitaire de Paris.

Conference







Sharing its expertise across the world

#### Syctom continued to promote French know-how In 2019, whether through large-scale cooperation missions or through international events dedicated to ecological transition.

Syctom thus made its contribution on several occasions, alongside the General Commissioner for Sustainable Development for the UN High Level Political Forum (HLPF) or as part of COP25 in Madrid in December, to present the Cométha project. On 14 and 15 October in Vienna (Austria), Syctom also participated in the IRCC Waste-to-Energy international conference on energy recovery. An article written by Syctom was published in the book of conference proceedings, volume 9 of the "Waste management - Waste-to-Energy" collection.

Eager to provide support and showcase its technological innovations, Syctom continues to cooperate internationally. It is developing an assistance and advisory activity for certain public authorities in charge of waste management in international metropolises. Syctom thus entered into a three-year partnership with the Metropolis of Manila (Philippines), and joined the action already initiated by SIAAP in the area of sanitation. The purpose of the project is to propose solutions for treating organic waste and screenings from pumping stations in order to reduce the volume of illegal dumps, avoid the complete choking of the Pasig River and its tributaries with waste and limit the burial of waste in landfills already nearing their saturation point.

Syctom also cooperates with Nursoultan, the capital of Kazakhstan, in the wake of its participation in the Astana International Exhibition in 2017. It was in this context that it received the visit of Kazakhstan's Deputy Minister of Ecology, Geology and Natural Resources in August 2019. A Russian delegation, also engaged in a cooperative approach with Syctom, visited the centres in Saint-Ouen-sur-Seine and Paris XVII in December 2019. Syctom joined the Council for International Cooperation set up to intervene with REO, a Russian federal public body responsible for implementing the waste management reform voted in 2019. Finally, in February, Syctom's President Jacques Gautier was welcomed to the Principality of Monaco by Cyril Gomez. General Director of the Ministry of Equipment, Environment and Town Planning. The technical interactions and the various visits to the facilities enabled Syctom and the Princely Government to discuss innovative solutions and processes to recover household waste more and better. These multiple approaches illustrate Syctom's commitment to the territorialisation of solutions and to concrete action, to achieve SDGs 11, 12 and 13.

> **E3.48 MILLION** ALLOCATED BY SYCTOM AS PART OF ITS INTERNATIONAL SOLIDARITY PROGRAMME

38 PROJECTS SUPPORTED IN 18 COUNTRIES

Publication director Jacques Gautier I Editor-in-chief Martial Lorenzo I Communication director Véronique Menseau I Coordination Solène Patron, Ludovic Eliot I Photo credits Syctom, the metropolitan agency for household waste / Black Euphoria, Florent Aceto, Stéphane Chalmeau, Thierry Dehesdin, Jean-Lionel Dias, Mathieu Génon, Natacha Gonzalez, D. Grandemange, Bertrand Guigou, Jean-François Humbert, Gabriela Medina, Gilpetipas, Didier Raux; Franck Badaire; Cité Plumes; Gevalor; Groupement IP13 / AIA Architectes; Alexia Leibrandt; Sacha Lenormand; Reichen et Robert & Associés; Atelier / TRANS 2019; Jean-Baptiste Eyguesier / Conseil d'État; Igor Lubinetsky; Shutterstock I Drafting-Design-Production stratéact' I Printed by Chaumeil on PEFC paper I June 2020

# TECHNICAL & FINANCIAL Syctom

## **OPERATIONS**

#### **Revenues 2019**



#### A FEE STRUCTURE THAT REMAINS CONSTANT

The pricing introduced in 2016 was maintained in 2019, offering member local authorities stability in their contributions and encouraging the development of sorting and separate collection of streams for material recovery.

Population share: **5.60 €/person** Tonnage share:

- Household waste and bulky objects: 94 €/t
- Selective collection: **0 to 30 €/t based on the performance**; grants for quality collections of 20 €/t beyond
- 25 kg/pers./year to 50 €/t beyond 55 kg/pers./year • Biowaste: **5 €/t**

## for €100

USE OF THE FEES



#### SALE OF PRODUCTS AND GRANTS FROM ECO-ORGANISATIONS

The sale of products stood at **€91.9 million** (€83.7 million once the accounting restatements were carried out). There was a decrease in the sale of products from energy recovery due to malfunctions in the turbine-generator unit in Ivry/Paris XIII which produced less electricity, and due to strikes that led to a decline in activity and the volume of steam produced. Products from material recovery also decreased following a price effect resulting from the drop in the selling prices of recycled materials.

#### CHANGES IN THE FEE AMOUNT FOR HOUSE-HOLD WASTE AND BULKY OBJECTS

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



FEES AND GRANTS PAID REVENUE STRUCTURE

The income from fees stood at €243.1 million and grants paid to the members amounted to €8.6 million (+8.9% compared to 2018). On a constant scope basis, the fees were stable. In 2019, the fees charged from member local authorities accounted for 56.5% of the operating revenues, followed by the sale of products (21.4%) and grants from eco-organisations (9.0%).

Aid from eco-organisations and grants amounted to €38.7 million. They grew by €2.1 million due to the increase in the recovery of "packaging" materials since the extension of new sorting instructions.

The increase in grants from Citeo offset the decrease in grants paid by Éco-Mobilier for certain types of waste, especially waste from illegal dumps.





€266.6 MILLION

Direct operating expenses amounted to €266.6 million. They continued to represent the main item of expenditure (64%). They increased by €5.8 million due in particular to the operating difficulties caused by the December strike and the greater use of transfer centres (in particular that of Romainville) and backup centres, as well as the use of inter-syndicate partnership agreements.

The increase in expenses is also due to the growth in tonnages linked to the reinforcement of selective collection and to the increased separate collection of bio-waste.

Lastly, it is due to the works carried out in selective collection sorting centres which required the payment of compensation to operators during their downtime.





The payroll was maintained at 2.1% of all operating expenses. Personnel expenses were stable in 2019 and amounted to &8.8 million.

At the end of 2019, Syctom's workforce included 129 agents (126 permanent jobs and 3 apprentices).

#### DEPRECIATIONS AND SELF-FINANCING

#### €58.1 MILLION

Depreciation charges were stable and amounted to  $\in$ 58.1 million. With the allocation of a part of the 2018 operating surplus as investment (up to  $\in$ 48.9 million), self-financing amounted to  $\in$ 107 million for 2019. Despite its growth, self-financing was half the amount of the previous year with respect to the total investment revenues and represented 22% of the total. With the increased borrowing in 2019, to the tune of  $\in$ 243 million (compared to  $\in$ 62 million the previous year), this method of financing took the first place (50% of total revenue).

#### WASTE PREVENTION PROGRAMME

#### €10.3 MILLION

The prevention programme (€10.3 million) saw an increase of 51.5% with the launch of the "Great challenge". In terms of budget, this resulted in significant financial support for the practice of home composting, reinforced awarenessraising operations carried out by the teams of Syctom eco-facilitators (in particular in connection with the new sorting instructions extended to all packaging and paper), and the continued implementation of other preventive actions: the Zero Waste Design competition and the eco-design process initiated to better prevent and reduce the quantity of waste produced, the territory outreach programmes carried out as part of the Zero Waste Zero Wastage Territory (TZDZG) certification, the momentum intensified to step up awareness-raising actions among the general public.

In all pages of the technical and financial report, the data has been rounded off for the sake of clarity, which explains possible, negligible discrepancies with the totals shown.

#### INVESTMENT



DEBT 2019: EVOLUTION OF INDEBTEDNESS At the end of 2019, Syctom's outstanding debt stood at  $\notin$ 604 million, marking a sharp jump compared to the previous year (+42%). It thus reached a level close to that recorded at the end of 2011.

- Syctom carried out several major operations: • -€19.6 million: annual repayment of the
- capital of loans contracted in previous years.
  -€44.8 million: early repayment of the last three most risky loans (contracted with DEXIA). In fact, the weight of structured loans

represented 6% at the end of 2019 (compared to 20% at the end of 2018). This strategy reflects Syctom's desire to continue cleaning up the debt stock and also helped improve its Standard & Poor's rating.  +€243 million: amount of loans mobilised. Syctom continued to opt for green financing (€75 million from La Banque Postale), while pursuing its policy of diversifying its sources of funding (€50 million from Caisse d'Épargne and €50 million from Société Générale). Syctom also started to mobilise a part of the loan taken from the European Investment Bank (€58 million in 2019).

In addition, Syctom contracted €230 million from the European Investment Bank and €200 million from the Caisse des Dépôts et Consignations, i.e. half of future needs. These loans should guarantee the necessary liquidity, along with the venture into the bond market.



studies for treating industrial effluents, etc.);

prevention plan for setting up waste collection centres and recovery centres and purchasing sorting tables in schools and equipment to prevent food waste.

# Investment programme by site

# WORKS RELATED TO **EXISTING FACILITIES** OR TO **NEW PROJECTS**

in €M incl. tax

in €M incl. tax sites and nature of works			IMPLEMENTATION PERIOD	WORKS FINANCED IN 2019
CONTINUOUS IMPROVEMENT AN	D ADAPT	ATION OF CENTRES TO THE EXTENSION OF SORTING INSTRUCTION	S*	41.6
IVRY / PARIS XIII		reconstruction of the energy recovery centre	2007-2027	90.2
ÉTOILE VERTE IN SAINT-OUEN -SUR-SEINE		project for the urban integration of the centre - works for landscaping, architectural redesign and flue gas treatment	2012-End 2024	42.8
OTHER PROJECTS (ROMAINVILLE BIOMETHANATION PROJECT WIT				8.7
SUPPORT PLAN FOR WASTE PRE	VENTION	AND SORTING OPERATIONS		0.8
OTHER CAPITAL EXPENDITURE				0.7
GRAND TOTAL				184.8

# \* WORKS FOR THE **CONTINUOUS IMPROVEMENT AND COMPLIANCE** OF SYCTOM FACILITIES

in €M incl. tax

SITES	WORKS FINANCED IN 2019
PARIS XVII	15.1
PARIS XV	9.4
IVRY / PARIS XIII	7
NANTERRE	6.9
ISSÉANE IN ISSY-LES-MOULINEAUX	1.6
SEVRAN	0.7
L'ÉTOILE VERTE IN SAINT-OUEN-SUR-SEINE	0.7
MULTI-SITES	0.2
TOTAL	41.6

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

Pursuant to Decree No. 2015-1827 of 30 December 2015 laying down various provisions for adaptation and simplification in the field of waste prevention and management.

This document will be submitted to a vote by the Syndicate committee of Syctom, the metropolitan agency for household waste, during its meeting of 19 June 2020.

#### TREATMENT OF TONNAGES

SYCTOM TREATMENT UNITS	
AND TONNAGES TREATED	

in tonnes				
	3 INCINERATION CENTRES			
	WITH ENERGY RECOVERY	AUTHORISED CAPACITY	TECHNICAL CAPACITY	QUANTITIES INCINERATED
ISSÉANE		510,000	510,000	469,257
IVRY / PA	RIS XIII	730,000	700,000	661,693
ÉTOILE VI	ERTE	650,000	600,000	486,424
TOTAL				1,617,374
<b>] / (</b>	5 SORTING CENTRES			QUANTITIES
ISSÉANE		23,000	23,000	
	CENTRES	23,000	23,000 33,000*	RECEIVED
ISSÉANE	CENTRES		-	RECEIVED
ISSÉANE NANTERF	CENTRES	40,000	33,000*	RECEIVED 22,794 28,562**
ISSÉANE NANTERF PARIS XV	CENTRES	40,000 20,000	33,000* Under construction	RECEIVED 22,794 28,562** 5,284
ISSÉANE NANTERF PARIS XV PARIS XV	CENTRES	40,000 20,000 45,000	33,000* Under construction 22,000***	RECEIVED 22,794 28,562** 5,284 20,669****

\* Due to 2 months of works \*\* Including 10,000 tonnes from SITRU \*\*\* Opening in June 2019 \*\*\*\* Including 2,052 tonnes from SITRU

WASTE RECEPTION CENTRES	QUANTITIES RECEIVED
GENNEVILLIERS	6,571
MEUDON	5,936
NANTERRE	9,767
ROMAINVILLE	5,515
26 MOBILE WASTE RECEPTION CENTRES OF HAUTS-DE-SEINE	2,121
MOBILE WASTE RECEPTION CENTRE IN IVRY-SUR-SEINE	316
TOTAL	30,226

#### EXTERNAL UNITS USED BY

SYCTOM AND TONNAGE PROCESSED

in	tonnes	

FOOD	
WASTE	QUANTITIES
PROVENCY (89)	525
GAILLON (27)	790
CHÂTEAU-RENARD (45)	723
GRAINCOURT-LÈS-HAVRINCOURT (62)	137
QUEVY (BELGIUM)	514
KALLO (BELGIUM)	422
NOYEN-SUR-SEINE (77)	181
USSY-SUR-MARNE (77)	1,615
THENNELIÈRES (10)	190
ECOSITE DE VERT-LE-GRAND (91)	211
ETAMPES (91)	493
PASSEL (60)	1,322
BLARINGHEM (59)	122
VOLCKERINCKHOVE (59)	20
HARTENNES-ET-TAUX (02)	45
PARIS 19 <sup>™</sup> (75)	34
TOTAL	7,344

<b>II</b>	
INCINERATION CENTRES	QUANTITIES INCINERATED
ARGENTEUIL (AZUR)	29,523
CARRIÈRES-SOUS-POISSY (SIDRU)	10,084
CARRIÈRES-SUR-SEINE (SITRU)	19,700
CRÉTEIL (SMITDUVM)	9,153
MASSY (SIMACUR)	1,423
OUARVILLE (SITREVA)	2,481
RUNGIS (RIVED)	9,035
SAINT-THIBAULT-DES-VIGNES (SIETREM)	66,607
SARCELLES (SIGIDURS)	23,204
THIVERVAL GRIGNON (SIDOMPE)	431
VAUX-LE-PÉNIL (SMITOM LOMBRIC)	512
VERT-LE-GRAND (SIREDOM)	1,166
VILLEJUST (SIOM)	1,863
TOTAL	175,181

1.20	
SC* SORTING CENTRES	QUANTITIES RECEIVED
LE BLANC-MESNIL (PAPREC)	18,998
LIMEIL (SUEZ)	31,424
RAMBOUILLET (SUEZ)	2,518
RUNGIS (SIEVD)	1,651
SAINT-THIBAULT (SIETREM)	1,862
VILLERS SAINT-PAUL (SMDO)	1,641
TOTAL	58,302

\*SC: selective collection

BO SORTING CENTRES	QUANTITIES RECEIVED (DIRECT CONTRIBUTIONS)
BONNEUIL (TAÏS)	9,556
BUC (NICOLLIN)	14,066
CHÂTILLON (TAÏS)	7,360
GENNEVILLIERS (PAPREC)	7,237
GENNEVILLIERS (SUEZ)	44,653
IVRY (CEMEX)	30,777
LA COURNEUVE (PAPREC)	42,820
NOISY (REVIVAL)	44,045
PIERREFITTE (CDIF)	3,882
GENNEVILLIERS (PAPREC)	Construction BO: 30,329
IVRY (CEMEX)	Construction B0: 16,954
TOTAL	251,679
BO: Bulky objects	

HAZARDOUS OR NON-HAZARDOUS WASTE STORAGE FACILITIES	QUANTITIES
HWSF VILLEPARISIS (SUEZ)	32,388
NHWSF BOUQUEVAL (REP)	38,716
NHWSF CLAYE-SOUILLY (REP)	129,217
OTHER NHWSF (PRIVATE CONTRACTS)	68,142
IWSF (PRIVATE BO CONTRACTS)	6,771



#### **OVERALL ANNUAL REPORT**

NUMBER OF MUNICIPALITIES WITHIN SYCTOM'S SCOPE	85
NUMBER OF INHABITANTS WITHIN SYCTOM'S SCOPE	
Figures taken from the population census for 2015 with an estimated change for 2017	5,837,380
GROSS TONNAGES OF WASTE	
Household waste	1,843,042
Sweepings and green waste (in tonnes)	29,607
SELECTIVE COLLECTION (in tonnes)	
Packaging	198,081
Bulky objects	231,422
Waste reception centres	30,225
Food waste	7,354
Green waste	179
FEES	
Tonnage share (in €/t of household waste and bulky objects)	94
Population share (in €/pers.)	5.6

#### RECOVERY

ENERGY

#### AND MATERIAL RECOVERY

ENERGY AND MATI	ERIALS FROM
Electricity (IN МWн)	111,319
Steam (ім МѠн)	2,607,643
Hot water (IN МWн)	52,480
B. H. J.	000.074

Hot water (IN МWн)	52,480
Bottom ash (IN TONNES)	293,071
Ferrous scrap (IN TONNES)	34,149
Non-ferrous scrap (IN TONNES)	2,469

#### RECYCLING FROM SELECTIVE COLLECTION (SC) D (IN TONNES)

Plastics, paper, cardboard, steel and 140.463 aluminium, small electrical appliances

÷₫	RECYCLING OF BULKY OBJECTS (BO) (IN TONNES)
$\overline{}$	

Wood, scrap metal, large cardboard	148,371	
boxes		

WASTE RECEPTION CENTRES (IN TONNES)	10,096
ORGANIC COMPOST (IN TONNES)	6,389

#### **INCOME FROM ENERGY** RECOVERY

in €M excl. tax



#### FROM INCINERATION

Sale of steam and electricity (Isséane and Ivry/Paris XIII)	48.9
Sale of steam and electricity (Étoile Verte at Saint-Ouen-sur-Seine)	25.5
TOTAL	74.5

#### FINANCIAL INDICATORS

Terms of operation of the disposal service entrusted to Syctom, Public content the metropolitan agency for household waste				
Total annual amount of Syctom's waste treatment expenditure (total actual expenditure in the operating section of the 2019 administrative account – excluding provisions)	€361.6 million			
Terms and conditions for financing the overall treatment servic	Contribution from local authorities, e Citeo aid for selective collection, sale of products			
Terms and conditions for setting the special fee for the disposal of assimilated products	l not applicable			
Annual total of main contracted and paid treatment services (excluding major maintenance and repairs)	€217 million incl. tax			
Total annual amount of investment and operating expenses (excluding capital transactions)	€798.3 million incl. tax			
Income from access rights to treatment and storage centres for authority is the contracting authority for assimilated waste	which the local not applicable			
Repayments for selective collection	Syctom grants <b>€4.1 million</b> Repayments for glass <b>€3.2 million</b>			
Itemised amount of aid received from approved bodies	Citeo <b>€35 million</b> OCAD3E <b>€0.1 million</b> Éco-Mobilier <b>€3.5 million</b>			

#### **INCOME FROM MATERIAL** RECOVERY

in €M excl. tax

COST

FROM SORTING OF SELEC COLLECTION AND BULKY OBJECTS	CTIVE
Newspapers/magazines	3.6
Plastics	2.9
Cardboard and recovered household packaging	3.9
Paper mix	0
Steel	0.4
Scrap iron and non-ferrous metals from BO	1.1
Glass	3.0
Wood	0

14.8

1 0

FROM INCINERATION	
Coroniron	

Scraphon	1.0
Non-ferrous scrap	0.5
COST	2.3
TOTAL	17.1

# LANDFILLING

NHWSF	154,770
(IN TONNES)	(EXCLUDING SORTING
	REJECTS)

INDEX OF REDUCTION in the quantities of non-hazardous, non-inert waste admitted into storage facilities Base 100 in 2010



#### MEASURES TAKEN IN 2019 TO PREVENT **OR REDUCE HARMFUL EFFECTS ON** HUMAN HEALTH AND THE **ENVIRONMENT**

#### **Continuous improvement and safety** at Syctom facilities

- Recruitment of a QSE apprentice in the Deputy general directorate for waste use and recovery (DGAEVD);
- Performance and reporting of a safety culture diagnostic at Syctom;
- Continued implementation of the contract for installing video protection on the unloading docks at the Isséane and Ivry/ Paris XIII centres;
- Drawing up of safety monitoring indicators (DGAEVD);
- Continued organisation of training sessions for household refuse dumpster drivers (DGAEVD);
- Launch of studies to improve the management of access to the operating sites;
- Launch of studies to strengthen fire protection in the sorting centre in Sevran;
- Participation in external working groups (Amorce & Fnade "How to prevent fire in sorting centres"; Amorce "Presentation of actions for securing Syctom unloading docks"; ICSI working group "Defining good practices for social dialogue to adopt a safety culture").

#### Control of emissions into the environment

- Modernisation of the L'Étoile Verte energy recovery centre in Saint-Ouen-sur-Seine (commissioning the first modified flue gas treatment line; continuing the works to modify the treatment of industrial effluents; launching and renewing a contract for monitoring and identifying sources of odours):
- Continuation of half-yearly campaigns (conducted by Syctom) to measure emissions from ERU stacks.

# BREAKDOWN OF TONNAGE IN DIFFERENT TREATMENT CHANNELS IN 2019

#### Actual figures as of 28/04/2020

The tonnages of sorting rejects indicated correspond to the actual tonnages recorded by the sorting centre operators (unlike in previous years where the tonnages of sorting rejects were calculated from the difference between incoming tonnages and recovered tonnages). This new calculation method explains the slight difference between the sum of tonnages leaving the sorting centres and the sum of incoming tonnages.

#### SELECTIVE COLLECTIONS PACKAGING AND GRAPHIC PAPER 198,081 t



Glass **128,078** t



MATERIAL RECOVERY

\*\* Bottom ash, f metal are subje To avoid double was calculated from the tonnag



Total Material and organic recovery

758,463 t

ANNUAL REPORT

Total Landfilling in non-hazardous waste storage facilities

59.5% of waste\*\*

HOUSEHOLD WASTE + DOWNGRADED WASTE + SORTIN REJECTS

235,947 t ₌

**9.6**% of waste

\* Downgraded wastes are contributions that do not comply with the technical requirements, and which therefore cannot be recovered and are treated as rejects. \*\* Bottom ash, ferrous and non-ferrous scrap metal are subjected to material recovery. To avoid double-counting, this percentage was calculated by subtracting these materials from the tonnage of energy recovery. All percentages are calculated including glass.

# TREATMENT COSTS

Cost per waste stream			-			$\mathbf{\Lambda}$	É
and treatment mode		INCINERATION	NHWSF	SELECTIVE COLLECTION**	BULKY OBJECTS	WASTE RECEPTION CENTRE	FOOD WASTE***
Tonnage treated		1,845,095	165,490	198,163	250,871	30,584	3,523
Contracts and operating charges*	€M	152.9	17.1	55.1	30.2	6.4	0.6
VAT recovery	€M	-3.1	-0.4	-4.4	-0.7	-0.1	0.0
Depreciations/Financial expenses	€M	58.2	1.3	10.4	-	-	-
FULL COST OF TREATMENT	€M	208.0	18.1	61.1	29.6	6.2	0.6
Revenues from the sale of materials	€M	2.6	-	10.0	1.1	0.1	-
Grants from eco-organisations retained by Syctom	€M	9.2	-	22.9	1.7	0.1	-
Other revenues (e.g. energy for incineration)	€M	63.7	-	2.0	-	0.1	-
TOTAL OWN REVENUES	€M	75.5	-	34.9	2.9	0.3	-
NET COST OF TREATMENT	€M	132.5	18.1	26.1	26.7	6.0	0.6
		72€/t	109€/t	132€/t	106€/t	<b>196</b> €/t	166€/t
Grants/repayments by Syctom for the benefit of members	€M	4.1	0.1	6.5	1.7	-	0.1
Grants and material revenues received by Syctom on behalf of members	€M	-	-	6.1	1.7	-	-
NET COST OF THE GRANT POLICY	€M	4.1	0.1	0.4	-	-	0.1
		2€/t	1€/t	2 €/t	0 €/t	0 €/t	30€/t
NET OVERALL COST (treatment and grant)	€M	136.6	18.2	26.5	26.7	6.0	0.7

\* treatment services, transfer services, taxes, major maintenance and repair, rents, treatment of rejects and downgraded waste

\*\* excluding tonnages received from SITRU at the Nanterre sorting centre

\*\*\* excluding tonnages and experimentation costs

Cost of all streams combined (HW/SC/BO/	TOTAL COST	TOTAL TONNAGE TREATED*	POPULATION INSEE 2016
waste reception centre)		2,339,731	5,799,590
	€M	€/tonne	€/pers.
Full cost*	316.2	135	55
Total own revenues	113.6	49	20
NET COST OF TREATMENT	202.6	87	35
NET COST OF THE GRANT POLICY	4.7	2	1
+ Structural charges	18.1	8	3
+ Prevention / Experimentation	12.7	5	2
NET OVERALL COST	238.1	102	41

\* excluding double counts such as certain sorting rejects that come under the incineration and SC sorting or BO sorting columns

# Notable factors explaining the changes seen in 2019

196€/t

196 €/t

106 €/t

2019

- Biowaste continued to grow strongly for a stable cost (in  $\ell/t$ ) compared to the two previous financial years. The total cost of 166  $\ell/t$  includes the cost incurred for the extended opening hours of the sites, as well as the cost associated with studies, training, characterisation and related services. The cost of reception, transfer and treatment is slightly higher than 100  $\ell/t$ .
- The cost of treating SC in  ${\mathbb C}/t$  rose significantly. This is explained, on the one hand, by rising expenditure (+9  ${\mathbb C}/t$ ) due to the operating expenses generated by the shutdowns of centres under construction and, on the other hand, by decreasing revenues (-9  ${\mathbb C}/t$ ) following the decline in the price of materials from recycling.
- The cost of treating BO (€/t) has been stable over the last three financial years. On the other hand, the cost of treatment in waste reception centres climbed sharply in 2019 given the increased cost of treating as-dug gravel from fixed waste reception centres.
- The net cost of treatment by incineration of RHW fell significantly (-6 €/t), due in particular to the decrease in Major Maintenance and Renovation (GER) expenses (-€15M). And this, despite a substantial decline in revenue (-€6 million).
- The €4 million increase in the overall net cost (+2 €/t) is mainly due to the rise in prevention and experimentation expenses. This growth is however mitigated by the reduction in the cost of treating RHW.

#### 2019

74€/t

110 €/t

134 €/t

# 2018

	INCINERATION	NHWSF C	SELECTIVE OLLECTION**	BULKY OBJECTS	WASTE RECEPTION CENTRE	FOOD WASTE***
	1,813,122	154,311	186,840	225,921	27,988	3,132
€M	162.3	15.4	50.2	28.2	5.3	0.5
€M	-3.3	-0.3	-4.0	-0.6	-0.1	0.0
€M	64.7	1.3	9.6	-	-	-
€M	233.7	16.3	55.9	27.6	5.2	0.5
€M	4.1	-	11.8	1.5	0.1	-
€M	9.6	-	21.0	1.7	0.1	-
€M	68.1	-	1.9	-	0.1	-
€M	81.9	-	34.6	3.2	0.2	-
€М	141.9	16.3	21.2	24.4	5.0	0.5
	78 €/t	105€/t	114€/t	108€/t	<b>177</b> €/t	165€/t
€M	4.1	0.1	6.0	1.7	-	0.1
€M	-	-	5.6	1.7	0.0	-
€М	4.1	0.1	0.3	-	-	0.1
	2 €/t	1€/t	2€/t	0 €/t	0€/t	30 €/t
€M	145.9	16.4	21.6	24.4	5.0	0.6
	80 €/t	106 €/t	115€/t	108 €/t	177 €/t	195€/t

#### ▙┓╶<u></u>┛╴╎╴╣ WASTE INCINERATION NHWSF SELECTIVE COLLECTION\*\* BULKY FOOD WASTE\*\*\* RECEPTION OBJECTS CENTRE 1,857,511 87,348 184,600\*\* 218,913 29,830 2,063 154.9 8.3 46.5 27.4 5.5 0.4 -2.0 -0.1 -3.7 -0.4 -0.1 -0.0 63.7 0.5 10.2 --\_ 216.7 53.1 27.0 5.4 8.6 0.3 3.9 1.9 14.2 0.1 \_ -12.8 19.5 1.6 0.1 \_ 0.1 67.2 19 ---83.9 \_ 35.6 3.5 0.2 \_ 132.7 17.4 23.5 5.2 0.3 8.6 71€/t 99€/t 94€/t 107 €/t 173€/t 166 €/t 4.0 0.1 5.5 1.6 0.0 0.1 5.1 1.6 0.0 \_ \_ -4.0 0.1 0.4 0.1 \_ \_ 2€/t 1€/t 2 €/t 0 €/t 0€/t 30 €/t 136.7 8.7 17.8 23.5 5.2 0.4 100€/t 97€/t 196€/t 107 €/t 173 €/t

2017

\*\* excluding tonnages received from SITRU at the Nanterre sorting centre \*\*\* excluding tonnages and experimentation costs

#### 2018

TOTAL COST	TOTAL TONNAGE TREATED*	POPULATION INSEE 2015
	2,341,576	5,767,713
€M	€/tonne	€/pers.
324.4	139	57
119.9	51	21
204.4	87	36
4.6	2	1
18.2	8	3
6.9	3	1
234.1	100	41

#### 2017

TOTAL COST	TOTAL TONNAGE TREATED*	POPULATION INSEE 2014
	2,296,753	5,725,612
€M	€/tonne	€/pers.
305.8	133	53
123.3	54	22
182.5	79	32
4.6	2	1
19.1	8	3
4.7	2	1
210.9	92	37

\* excluding double counts such as certain sorting rejects that come under the incineration and SC sorting or BO sorting columns

# Some information on methodology

- The policy of support to local authorities (remoteness, hosting, Citeo repayment, Éco-mobilier repayment) is highlighted because it cannot be assimilated to conventional treatment expenditure.
- The cost calculation is the result of an analysis that performs restatements so that the data presented reveal the most reliable trends possible.
   It is therefore not the exact reflection of the accounting.
- For example, some points in the previous financial year report presented are an estimation that is as close as possible to reality. From one year to the next, the final data may be substituted for the estimated values.

## **SELECTIVE COLLECTION**



Some waste goes through transfer centres in line with the rationale of proximity.

## BREAKDOWN OF TONNAGE 2019

	TONNAGES			
SORTING CENTRES	RECEIVED (including downgraded waste)	SORTED	TONNAGES	OPERATORS

#### SYCTOM SORTING CENTRES

In addition to the selective collection streams from its member local authorities,

Syctom also treats those provided by 12 SITRU municipalities.

ISSÉANE	22,794	22,669	15,401	TSI (SUEZ)
NANTERRE (SYCTOM CONTRIBUTIONS)	18,561	18,534	12,684	VEOLIA PROPRETÉ
NANTERRE (SITRU CONTRIBUTIONS)	10,000	9,997	6,982	VEOLIA PROPRETÉ
PARIS XV	5,284	5,284	3,830	XVÉO (VEOLIA)
PARIS XVII (SYCTOM CONTRIBUTIONS)	18,647	18,529	13,131	CNIM
PARIS XVII (SITRU CONTRIBUTIONS)	2,052	2,052	1,568	CNIM
ROMAINVILLE	56,525	56,103	43,756	VALORAM (URBASER)
SEVRAN	17,968	17,933	10,912	IHOL (VEOLIA)
SUB-TOTAL SYCTOM'S CONTRIBUTIONS	37,208	37,063	25,815	
SUB-TOTAL SITRU'S CONTRIBUTIONS	12,052	12,049	8,550	
SUB-TOTAL SYCTOM'S SORTING CENTRES	102,571	101,989	73,899	
EXTERNAL SORTING CENTRES				
SUB-TOTAL EXTERNAL SORTING CENTRES	58,302	58,286	40,748	
GRAND TOTAL	210,134	209,387	149,013	

#### **RECYCLABLE MATERIALS** RECOVERY CHANNELS

in tonnes						
		TONNAGES SYCTOM 2019	PURCHASERS	DESTINATION	FUTURE	TRANSPORT
	NEWSPAPERS REVIEWS MAGAZINES	41,904	UPM	Paper mill: UPM-Chapelle Darblay at Grand-Couronne (76)	Newspaper	90% river (barge or containers). The rest by road
	Brown cardboard recyclable household packaging (EMR) + paperboard packaging	61,196	SUEZ RV	Paper mills: Europac (76) Saica (02) Emin Leydier (10)	Brown cardboard, corrugated base paper	40% river (barge). The rest by road
	PAPER MIX	15,054	UDREP	Cardboard mills of Gondardennes or RenoDiMedici (62)	Corrugated or flat cardboard	Road
	LIGHT FOOD PACKAGING (LFP)	1,444	REVIPAC	Paper mills: Georgia Pacific (45) Nova Tissue (88)	Toilet and household paper	Road
ÔÔô	PACKAGING MADE OF RIGID PLASTIC SUCH AS PET	9,982	SUEZ RV	Mostly factory: FPR Limay (78), Freudenberg in Colmar (68) and Regene Atlantique in Bayonne (64)	Raw material regenerated in the form of granules used to make bottles (rPET) or fibres (textile)	River transport (barge) after regrouping the streams at Gennevilliers for Limay. The rest by road
	PACKAGING MADE OF RIGID PLASTIC SUCH AS HPPE OR PP	512	PAPREC GROUP	_ Mostly factories in Germany	Raw material regenerated in the form of granules that can	
	PACKAGING MADE OF RIGID PLASTIC SUCH AS HDPE OR PP OR PS	3,691	PAPREC GROUP	(Rheinfelden and Lunen), in France (La Loyère) and Near Europe	be used to make various plastic products (sewer pipes, watering cans, etc.)	Road
	LDPE FILMS AND COVERS	1,725	SUEZ RV	Mostly factory: Machaon (51) + Near Europe	Raw material regenerated in the form of granules used to make plastic films	Road
	ALUMINIUM FROM SELECTIVE COLLECTION	545	REGEAL AFFIMET / SUEZ RV	Factory: Regeal-Affimet in Compiègne (60) for large aluminium Factories: RVM (28) and Alunova (Germany) for the small aluminium stream	Aluminium alloys	Road
	ALUMINIUM FROM BOTTOM ASH	2,319	GAL00	Factory: GALLOO in Halluin (Belgium)	Aluminium alloys	Road
	STEEL FROM SELECTIVE COLLECTION	2,858	ARCELOR MITTAL	Factory: Arcelor in Dunkerque 59		
	STEEL FROM BOTTOM ASH	32,411	GAL00	Large scrap metal: taken over by GALLOO IDF in Bonneuil s/Marne (94) Small scrap metal: taken over by GALLOO Metal or other subcontractors (Belgium and 59)	Steel	Road

#### CHANGE IN COLLECTIONS INTENDED FOR MATERIAL RECOVERY SINCE 2001

#### SELECTIVE COLLECTIONS



	%	TONNES
2018-2019	5.89%	11,011 t
2001-2019	116.78%	106,706 t

In 2019, the tonnages from household and paper packaging collections increased by nearly 6% due to the widespread application of the extended sorting instructions in the entire territory. The campaigns deployed by local authorities in this context also helped citizens understand the ease of sorting, thus contributing to the overall increase in selective collection, all materials combined.

## **RESIDUAL HOUSEHOLD WASTE**



**OPTIMISING THE SUPPLY** TO ENERGY RECOVERY CENTRES To optimise the supply and energy production of its ERUs, Syctom launched an urban logistics project. The first phase of the project, active since 2019, enabled it to have a flow regulation tool: during periods of high activity in the centres, a part of the waste is directed to an external transfer centre, then redirected to Syctom's energy recovery facilities.

This system made it possible to divert

10,000 tonnes of household waste from landfilling.

In 2019, household waste baling equipment was also installed on the Routière Est Parisien (REP) site in Claye-Souilly. It thus makes it possible to build up a buffer stock to optimise the supply to Syctom's energy recovery centres.

#### BREAKDOWN OF TONNAGE 2019

RECOVERY Ferrous and TONNAGES INCINERATED Steam sold (IN MWH) Electricity sold (IN MWH) Bottom ash (IN TONNES) non-ferrous scrap (IN TONNES) INCINERATION UNITS OPERATORS ISSY URBASER ENERGY (URBASER) ISSÉANE 469.257 639,322 50,413 74,335 9,470 IVRY / PARIS XIII 661,693 1,030,113 20,393 106,776 15,568 IP13 (SUEZ) DALKIA ÉTOILE VERTE 79.092 486,424 875.207 3.006 9.692 WASTENERGY TOTAL SYCTOM CENTRES\* 34,730 1,617,374 2,544,642 73,813 260,209 TOTAL EXTERNAL CENTRES\*\* 175,181 63,001 37,506 32,867 1,887 1,792,555 TOTAL 2,607,643 111,319 293.070 36,617

\* This tonnage includes actually incinerated waste, excluding pit-level variations in Syctom's HWIPs. \*\* For the external centres, the indicated tonnage corresponds to the tonnage incinerated on behalf of Syctom

\*\* For the external centres, the indicated tonnage corresponds to the tonnage incinerated on behalt of Syctom (details on the tonnages treated in the external centres on page 6).

## Control of air emissions from Syctom's incineration centres with energy recovery

		NATURE OF EMISSIONS         Concentrations in mg/Nm³       Antimony         at 11 % 02       + arsenic + lead         + chrome + cobalt       Diox						Dioxins	
	Dust	Hydrochloric acid	Hydrofluoric acid	Sulphur dioxide	Nitrogen oxide	Cadmium + thallium	Mercury	+ copper + manganese + nickel + vanadium	and furans (in ng I-TEQ /m <sup>3</sup> )
Maximum emission values applicable since 28 Dec. 2005 Ministerial order of 20 Sept. 2002	10	10	1	50	200 (80)*	0.05	0.05	0.5	0.1
IVRY / PARIS XIII									
January (Syctom)	4.1	1.3	0.02	21	60	0.003	0.002	0.060	0.009
April	4.6	1.6	0.13	26	43	0.003	0.0003	0.225	0.006
September (Syctom)	4.3	1	0.05	30	39	0.003	0.008	0.043	0.016
November	3.4	0.47	0.01	18	31	0.003	0.0003	0.052	0.008
ÉTOILE VERTE									
February (Syctom)	1.5	0.39	0.006	3.1	39	0.001	0.016	0.017	0.008
July	1.5	1.8	0.06	7	56	0.001	0.006	0.034	0.008
August (Syctom)	0.9	1.1	0.04	5.3	42	0.001	0.0001	0.026	0.012
October	0.16	0.03	0	2.2	50	0.001	0.002	0.046	0.003
ISSÉANE									
January	0.8	3.8	0	1.1	46	0.00005	0.001	0.01	0.002
March (Syctom)	1	4.7	0.02	2.3	44	0.00001	0.0005	0.008	0.027
May	0.5	2.2	0.05	3.6	35	0.0001	0.0004	0.03	0.003
August	0.2	1.3	0.01	1.4	36	0.00006	0.0005	0.02	0.001
August (Syctom)	1	11	0.04	3.1	42	0.0004	0.002	0.06	0.011
November (Syctom)	0.7	4	0	3.8	45	0	0.001	0.001	0.004

\* Ile-de-France's plan for the protection of the atmosphere has set the maximum emission value at 80 mg/Nm3 (the threshold set by the European directive is 200 mg/Nm3). This threshold is reiterated in the operating permit for Ivry-Paris XIII and the Étoile Verte. At Isséane, the operating permit issued by the Prefect of Hauts-de-Seine sets the threshold for the emission of nitrogen oxides at 70 mg/Nm<sup>3</sup>.

# Waste dumped in storage facilities

1-6	
REFIOM PRODUCED BY HWIP	
HWIP in lvry/Paris XIII	16,730
HWIP in Isséane	6,245
HWIP in Étoile Verte	9,413
TOTAL HWSF	32,388

6,771
6,771

1=0	
NON-HAZARDOUS WASTE SENT TO NHWSFS	

BOUQUEVAL (SYCTOM CONTRACT)		
HW	33,504	
Sorting rejects from BO	5,213	
SUB-TOTAL	38,717	
CLAYE-SOUILLY (SYCTOM CONTRACT)		
HW	124,883	
SC sorting rejects	498	
BO sorting rejects	3,837	
SUB-TOTAL	129,217	

167,934

REFIOM: Residues from purification of flue gas from household waste incineration HWSF: Hazardous waste storage facility IWSF: Inert waste storage facility NHWSF: Non-hazardous waste storage facility

NHWSF EXCLUDING SYCTOM CONTRACT

As-dug gravel sorting rejects from reception centres	116
Sorting rejects from BO	68,026
TOTAL NHWSF (excluding Syctom contract)	68,142
GRAND TOTAL NHWSF	236,075

These tonnages correspond to waste that is actually sent to storage centres. They do not take stock variations into account.

TOTAL NHWSF (Syctom contract)

**FOOD WASTE** 



#### BREAKDOWN OF TONNAGE 2019

PRODUCERS	QUANTITIES RECEIVED
NON-HOUSEHOLD FOOD WASTE	5,989
HOUSEHOLD FOOD WASTE	1,355
REJECTS	10
TOTAL RECOVERED	7,344

## **RECEPTION** SITES

LOCATIONS	OPERATORS
GENNEVILLIERS (92)	GÉNÉRIS
VILLENEUVE-SAINT-GEORGES (94)	GÉNÉRIS
STAINS (93)	MOULINOT
SAINT-DENIS (93)	SARVAL
LIMEIL-BRÉVANNES (94)	SUEZ

#### **TREATMENT** SITES

LOCATIONS	TONNAGE
PROVENCY - 89	525
GAILLON - 27	790
CHÂTEAU-RENARD - 45	723
GRAINCOURT-LES-HAVRINCOURT - 62	137
QUEVY (BELGIUM)	514
KALLO (BELGIUM)	422
NOYEN-SUR-SEINE (77)	181
USSY-SUR-MARNE (77)	1,615
THENNELIÈRES (10)	190
ECOSITE DE VERT-LE-GRAND (91)	211
ÉTAMPES - 91	493
PASSEL (60)	1,322
BLARINGHEM - 59	122
VOLCKERINCKHOVE (59)	20
HARTENNES-ET-TAUX (02)	45
PARIS 19 <sup>™</sup> (75)	34

## **TREATMENT** OF FOOD WASTE

TREATMENT METHODS	BREAKDOWN
METHANATION	96.7%
COMPOSTING	3.3%

## **BULKY OBJECTS**

#### CATCHMENT AREAS AS ON 31 DECEMBER 2019



#### BREAKDOWN OF TONNAGE 2019

<b>B</b> Q <u>F</u> ]	
SORTING CENTRES FOR BULKY OBJECTS	





I OK BOEKT OBSECTS	RECEIVED	RECOVERED	OF ERATORS
BUC	14,066		NICOLLIN
CHÂTILLON	7,360	8,694*	TAÏS
GENNEVILLIERS (SUEZ)	44,653	23,773	SUEZ
GENNEVILLIERS (PAPREC)	7,237	3,661	PAPREC
LA COURNEUVE	42,820	20,432	PAPREC
NOISY DRT	44,045	25.452*	DRT
PIERREFITTE	3,882	25,452	CDIF
IVRY (CEMEX)	30,777	22.585*	CEMEX
BONNEUIL	9,556	22,303	TAIS
TOTAL	204,396	104,597	

RECEIVED

SORTING OF CONSTRUCTION BULKY OBJECTS	TONNAGES RECEIVED	TONNAGES	OPERATORS
GENNEVILLIERS	30,329	29,947	PAPREC
IVRY	16,954	13,826	CEMEX
TOTAL	47,284	43,774	

**GRAND TOTAL** 251,679 148,371

CDIF

\* Recovered tonnages come from bulky objects

as direct contributions and as transfers from other sites

#### DETAILED OPERATIONS REPORT

## WASTE RECEPTION CENTRES

#### MAP OF WASTE RECEPTION CENTRES AS ON 31 DECEMBRE 2019



#### BREAKDOWN OF TONNAGE 2019

WASTE RECEPTION CENTRES	TONNAGES RECEIVED	TONNAGES RECOVERED	OPERATORS
ROMAINVILLE	5,515	2,619*	GÉNÉRIS (VEOLIA)
IVRY MOBILE WASTE RECEPTION CENTRE	316	151	SUEZ
GENNEVILLIERS	6,571	1,935	SUEZ
NANTERRE	9,767	2,734	SUEZ
MEUDON	5,936	1,979	SUEZ
26 MOBILE WASTE RECEPTION CENTRES	2,121	680	SUEZ
TOTAL	30,225	10,096	

\* The as-dug gravel from the Romainville waste reception centre is then sorted in a BO centre. Tonnages recovered from this sorting are not included here.





the metropolitan agency for household waste

The public authority for the sustainable management of household waste in the Paris region

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