
Ceamse

Espinillo. *Vachellia caven.*

We are World Champions,

Let´s be Planet Champions.

For nearly 50 years, we have worked with an integrated and sustainable waste management model, incorporating technology, developing environmental solutions, and promoting a circular economy. **Our commitment to the present and the future drives us to keep moving forward.**

CEAMSE is an interjurisdictional company created in 1977 by the Province of Buenos Aires and the Autonomous City of Buenos Aires **to manage the solid urban waste of the Buenos Aires Metropolitan Area (AMBA),** promoting environmental care and biodiversity conservation. We apply modern environmental management processes, with a constant commitment to innovation, sustainability, environmental protection, and the incorporation of new technologies.

Module in the Northern Environmental Complex III

Mission

We are a company that provides Environmental Management services for the community, specializing in the research, definition, planning, and implementation of the best technologies, practices, and processes applicable to the comprehensive management of waste.

Vision

To coordinate, manage, and employ the best available resources that allow us to provide the community with a modern and professional solution for the comprehensive management of household and private waste, ensuring: sustainability through compliance with the most demanding standards, minimal environmental impact, the promotion of waste separation at source, constant technological innovation, best sanitation practices, and the transformation of environmental liabilities into energy or other valuable assets.

United Nations Global Compact

CEAMSE adheres to the United Nations Global Compact, the world's largest corporate sustainability initiative, which promotes universal principles on human rights, labor standards, environmental protection, and anti-corruption. This commitment reinforces CEAMSE's dedication to social responsibility and sustainability.

CEAMSE Integrity Program

CEAMSE has an Integrity Program duly approved by its Board of Directors.
The Integrity Program is a mechanism designed to identify, prevent, and correct irregularities or illicit acts according to operational risk. Its purpose is to prevent and eliminate corruption risks, as well as to minimize any other risk that could significantly impact the organization's integrity.

The Trinorma certification ISO 9001, ISO 14001, and ISO 45001, audited and endorsed by TÜV Rheinland, supports CEAMSE's management.

Authorities

Claudio Tapia
President

Gustavo Ricardes
Executive Director

Ezequiel Jarvis
Vice President

Mario Cupelli
Director

Gustavo Adrián Reyes
General Manager

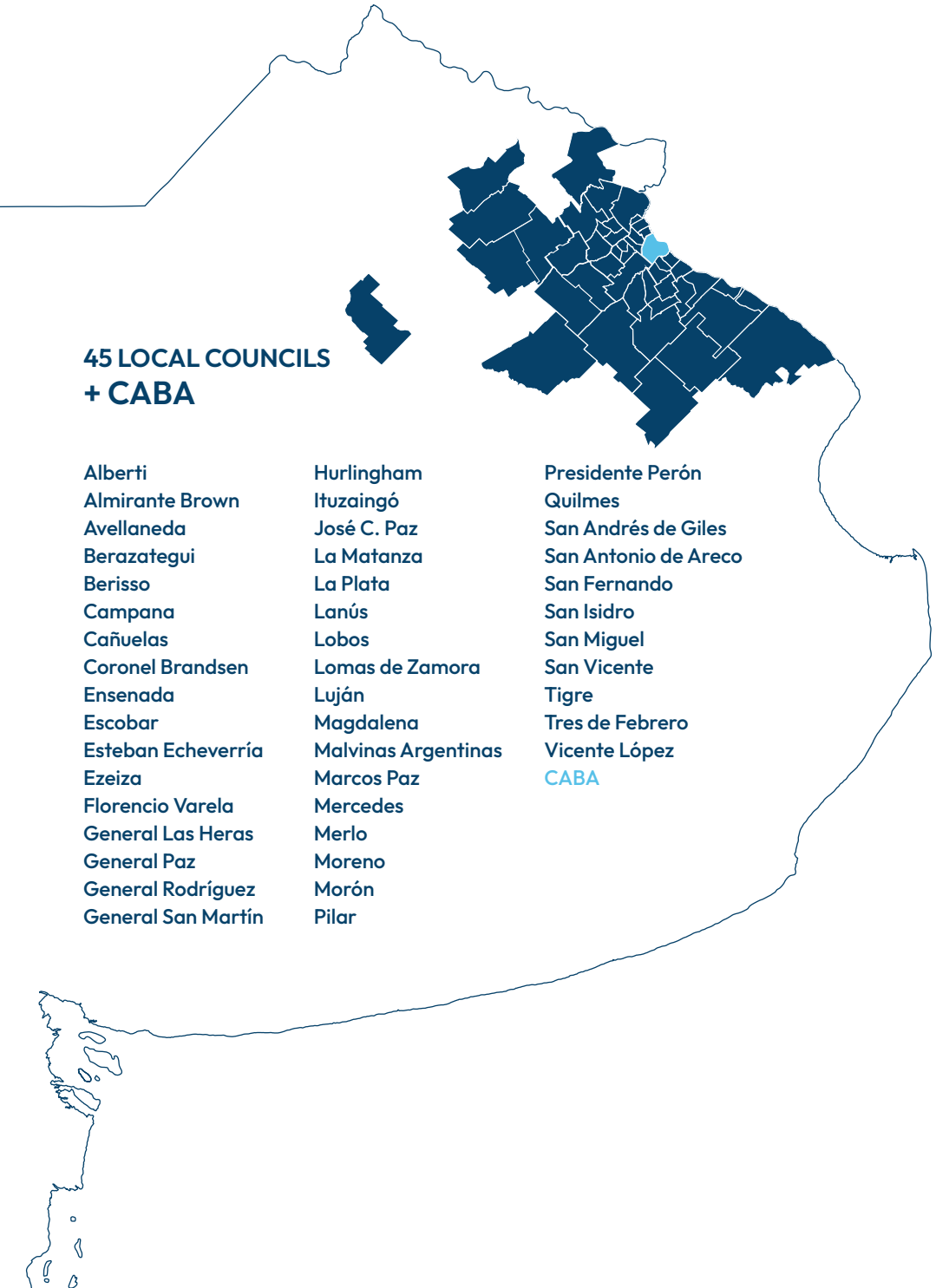
Supervisory Commission

Alejandro Ameijenda
President

Víctor Bambill
Vice President

Francisco Capozzolo
Titular Syndic

CEAMSE environmental service coverage



45 LOCAL COUNCILS
+ CABA

Alberti
Almirante Brown
Avellaneda
Berazategui
Berisso
Campana
Cañuelas
Coronel Brandsen
Ensenada
Escobar
Esteban Echeverría
Ezeiza
Florencio Varela
General Las Heras
General Paz
General Rodríguez
General San Martín
Hurlingham
Ituzaingó
José C. Paz
La Matanza
La Plata
Lanús
Lobos
Lomas de Zamora
Luján
Magdalena
Malvinas Argentinas
Marcos Paz
Mercedes
Merlo
Moreno
Morón
Pilar
Presidente Perón
Quilmes
San Andrés de Giles
San Antonio de Areco
San Fernando
San Isidro
San Miguel
San Vicente
Tigre
Tres de Febrero
Vicente López
CABA

18 million
inhabitants served

9 thousand Km²
covered by the service

45 municipalities
+ CABA

+19 thousand tons/day processed

8 thousand tons/day transferred

5 Transfer Stations

30 MW intregated
into the CAMMESA grid

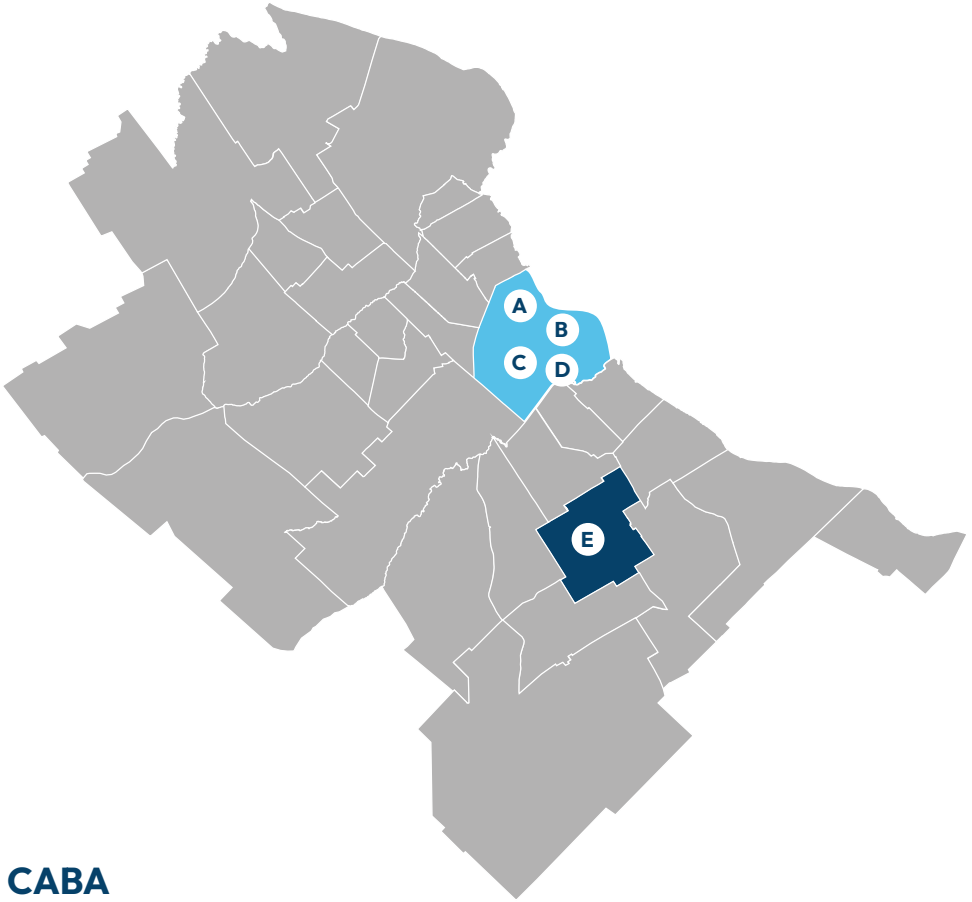
4 active Environmental Complexes

1 Environmental Complex in post-closure phase

Other environmental services

• **CEAMSE** also assists municipalities in the eradication of open dumpsites and maintains cooperation agreements with various government agencies.

Transfer Stations



CABA

- A Colegiales Transfer Station
- B Pompeya Transfer Station
- C Flores Transfer Station
- D Zavaleta Transfer Station

ALMIRANTE BROWN

- E Almirante Brown Transfer Station

Colegiales

Receives waste from the Autonomous City of Buenos Aires.

40,000 tons/month.
(processed on average)
100% CABA.

Flores

Receives waste from the Autonomous City of Buenos Aires, Avellaneda, Lomas de Zamora, Quilmes, Lanús, and private generators (GP).

41,000 tons/month.
(processed on average)
62% CABA.
36% PBA.
02% PG.

Pompeya

Receives waste from the Autonomous City of Buenos Aires, Avellaneda, Lanús, and Quilmes.

47,000 tons/month.
(processed on average)
50% CABA.
50% PBA.

Zavaleta

Receives dry waste, soil, rubble, and construction debris from the Autonomous City of Buenos Aires, Avellaneda, Lanús, Lomas de Zamora, Quilmes, and ACUMAR.

42,500 tons/month.
(processed on average)
95% PBA.
02% PG.
03% ACUMAR.

Almirante Brown

Receives waste from Almirante Brown, Berazategui, Florencio Varela, Presidente Perón, Esteban Echeverría, Quilmes, Lanús, Lomas de Zamora, San Vicente, private generators, and ACUMAR.

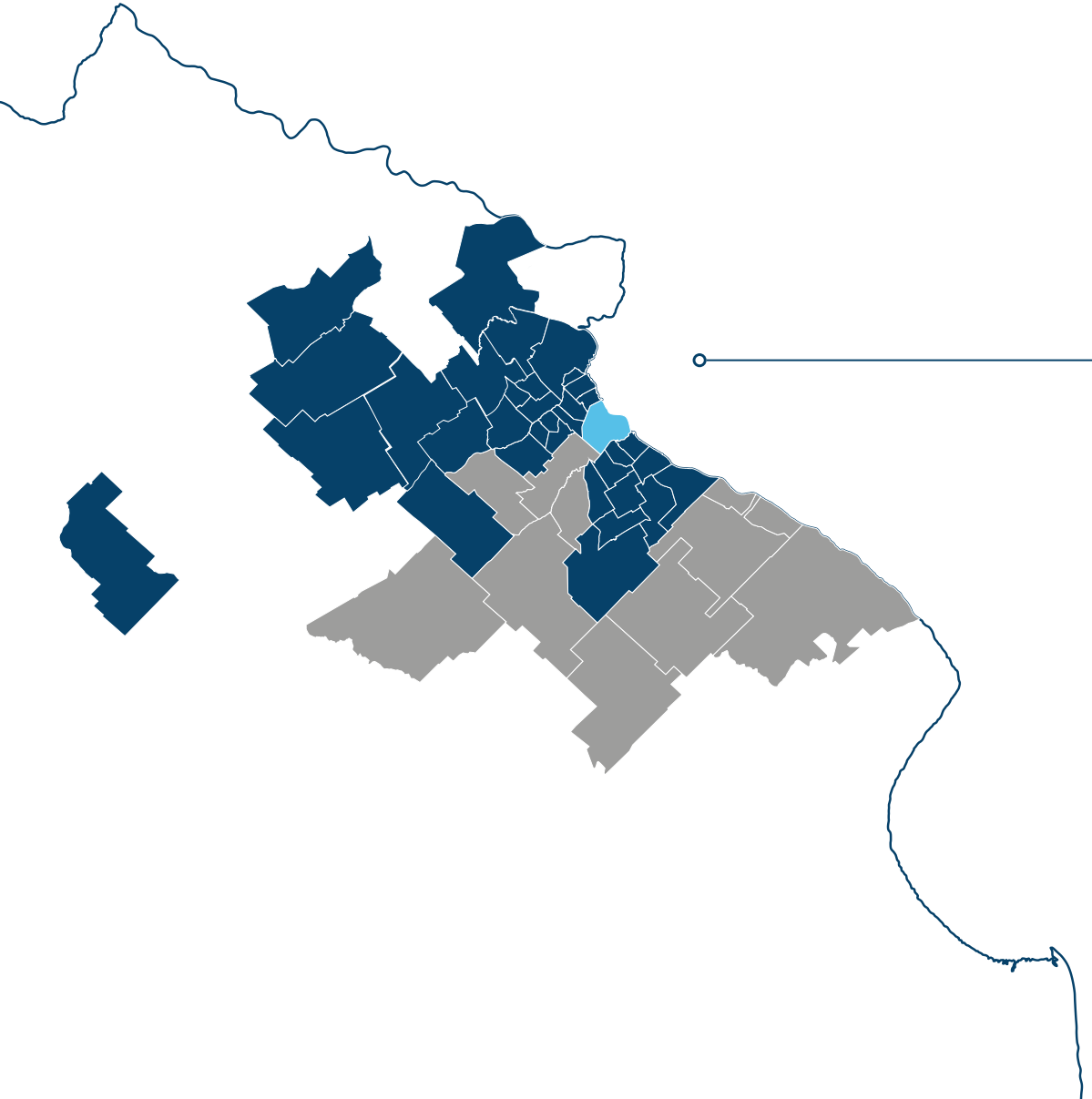
50,000 tons/month.
(processed on average)
95% PBA.
02% PG.
03% ACUMAR.

Operating Sites

Norte III Environmental Complex

450.000
tons of waste per month

85%
of the total system's waste



Jurisdictions that dispose waste at Norte III Environmental Complex

- Alberti
- Almirante Brown
- Avellaneda
- Berazategui
- Campana
- Escobar
- Esteban Echeverría
- Florencio Varela
- General Las Heras
- General Rodríguez
- General San Martín
- Hurlingham
- Ituzaingó
- José C. Paz
- Lanús
- Lomas de Zamora
- Luján
- Malvinas Argentinas
- Mercedes
- Merlo
- Moreno
- Morón
- Pilar
- Presidente Perón
- Quilmes
- San Andrés de Giles
- San Antonio de Areco
- San Fernando
- San Isidro
- San Miguel
- San Vicente
- Tigre
- Tres de Febrero
- Vicente López
- CABA

15.000.000 **People** served


Norte III
Environmental
Complex

Gas Treatment and Energy Generation Plants

The gases generated by disposed waste are captured and treated. Through an energy recovery process, the biogas produced by the decomposition of organic waste is converted into clean electricity, which is injected into the national grid — contributing to renewable energy use and environmental protection.

Social Plants

Currently, 11 Social Recycling Plants operate in the “Reciparque” area, employing 724 workers. CEAMSE provides the infrastructure, equipment, and logistics for their operation.

Together, these plants process between 15,000 and 19,000 tons of solid urban waste per month. They receive materials separated at source from municipalities such as Morón, Vicente López, Hurlingham, San Isidro, and Tres de Febrero, as well as private generators. The plants achieve an average material recovery rate of 7%.

Gas Treatment and Energy Generation Plants

Composting Plant

The composting plant can process up to 800 tons per month of pruning and green waste. Of this total, around 176 tons are transformed into compost, certified by SENASA as an “Organic Amendment.”

This compost can be used as a soil improver for green spaces and organic gardens. CEAMSE produces and distributes this material in compliance with SENASA standards and recommended application ratios.

Tire Recycling Plant

CEAMSE operates Argentina’s first industrial plant for end-of-life tire recycling. The main product is granulated rubber, a key input for synthetic turf production, creating added value for domestic and export markets.

Recovered metal components are reused in the metallurgical industry.

Composting Plant

Social Plants

Mechanical Biological Treatment (MBT) Plant

The first of its kind in Argentina and South America, marking a milestone in integrated waste management. Its operation focuses on recovering recyclable materials and reducing the amount of waste sent to final disposal.

With a treatment capacity of 1,200 tons per day, the plant recovers plastics, paper, cardboard, and ferrous and non-ferrous metals — all reprocessed as secondary raw materials for industry.

It also produces Refuse-Derived Fuel (RDF), used as a substitute for fossil fuels in industrial processes.

Mechanical Biological Treatment Plant

Tire Recycling Plant

Ecobrick Manufacturing

Ecobricks are produced from a mixture of sand, lime, cement, and bio-stabilized organic material from the MBT Plant. These bricks have been tested and certified by INTI for industrial use.

Leachate Treatment Plants

CEAMSE operates three leachate treatment plants at the Norte III Complex, using nano- and ultrafiltration technology, with a total capacity of 3,950 m^3 per day.

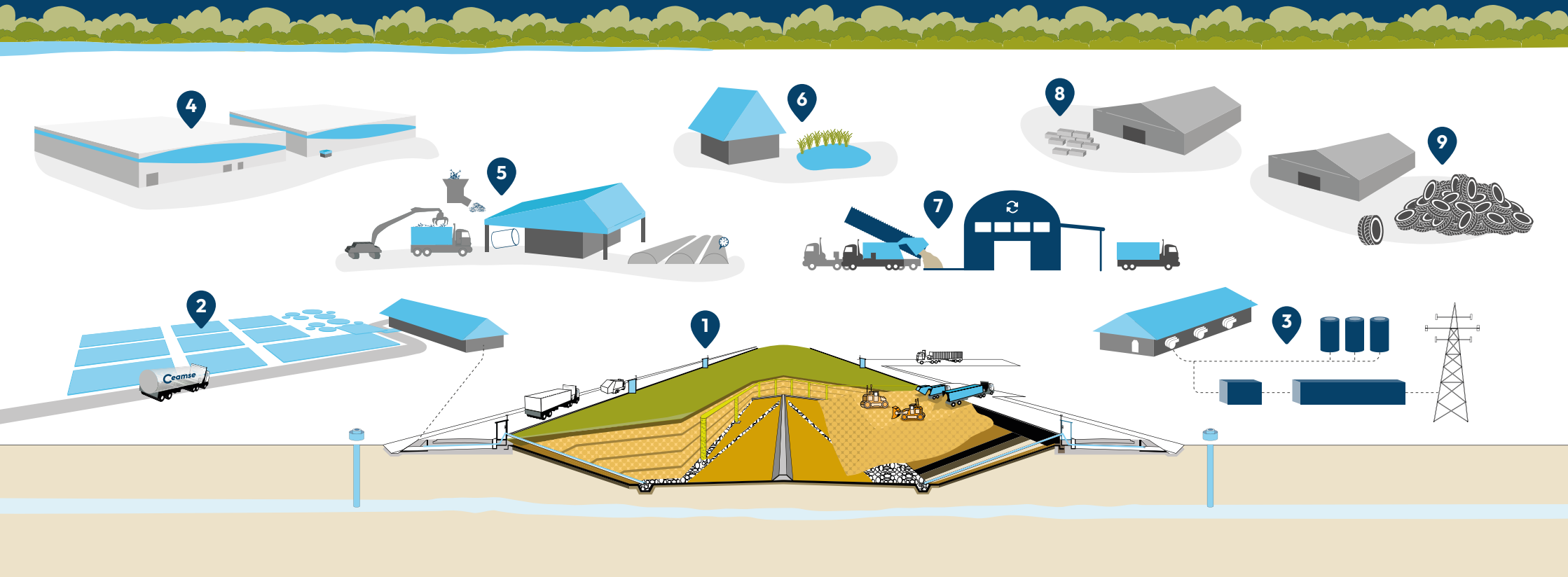
Seventy percent of the treated liquid is reused on-site for road irrigation, equipment cleaning, and facility maintenance. The treated water meets and exceeds standards set by the Water Authority, ensuring responsible and efficient environmental management.

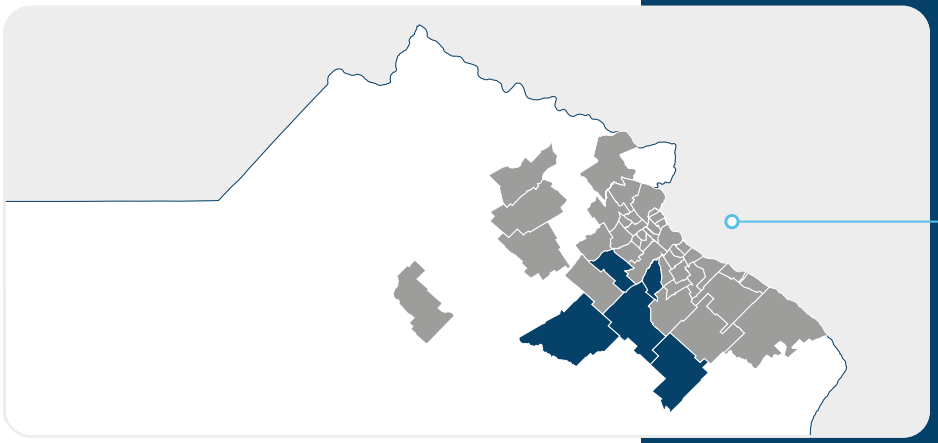
Ecobrick Manufacturing

Leachate Treatment Plants

Norte III Environmental Complex

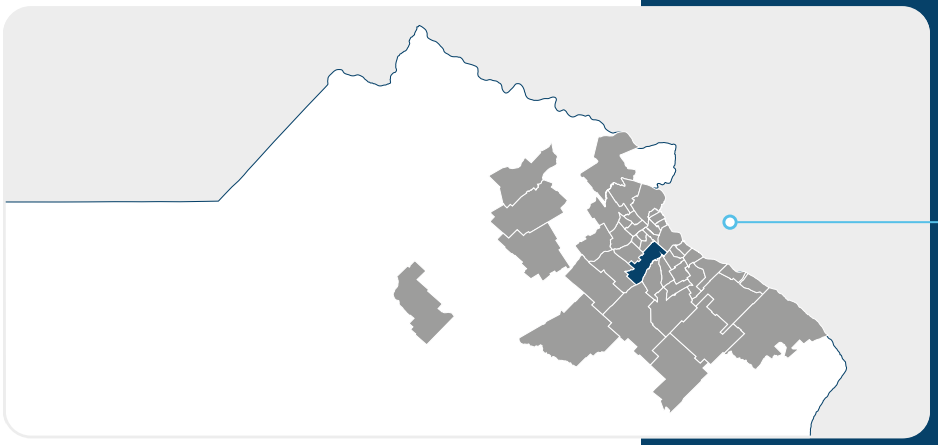
1. Sanitary Landfill.
2. Leachate Treatment Plants.
3. Gas Treatment and Energy Generation Plants.
4. Mechanical Biological Treatment (MBT) Plant.
5. Composting Plant.
6. Theme Park.
7. Social Recycling Plants.
8. Ecobrick Manufacturing.
9. Tire Recycling Plant.





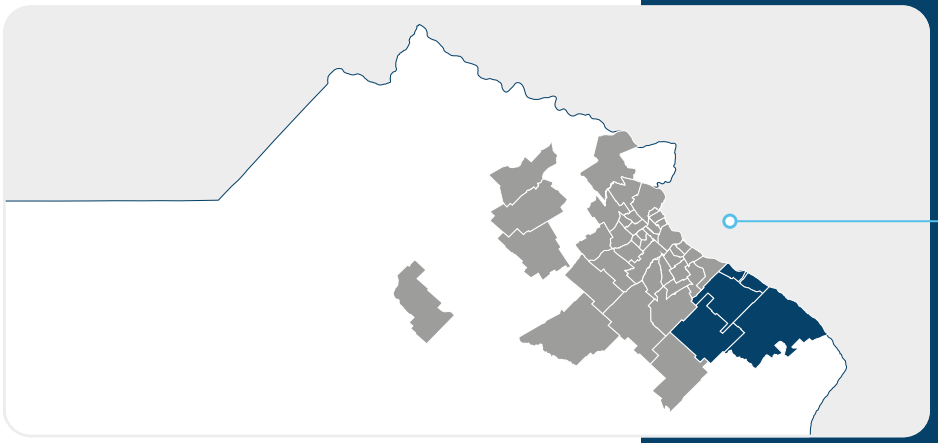
Municipalities Disposing at Ezeiza Environmental Complex

Cañuelas
Ezeiza
General Paz
Marcos Paz
Lobos



Municipalities Disposing at González Catán Environmental Complex

La Matanza



Municipalities Disposing at Ensenada Environmental Complex

Berisso
Coronel Brandsen
Ensenada
La Plata
Magdalena

Villa Domínico Enviromental Complex:

A model of post-closure regeneration.

The Villa Domínico Environmental Complex is a concrete example of how the post-closure stage of a sanitary landfill can become a hub for innovative and sustainable projects.

After its operational closure in January 2004—having received over 48 million tons of household waste during 25 years of operation—it took on new challenges, focusing on specialization, environmental preservation, and technological development.

Today, the Complex not only carries out rigorous monitoring of groundwater, surface water, and leachates (and gas treatment until 2020) but also serves as a center for applied environmental knowledge.

Nursery: production for biodiversity.

The Complex operates a nursery — a key element in CEAMSE's biodiversity enrichment strategy for the Metropolitan Area. It produces a wide variety of native species, with emphasis on those facing different levels of threat, including critically endangered ones.

Each year, about 70,000 plants from 70 native species from the Pampas and Paraná Delta ecoregions are cultivated. These plants provide essential food and shelter, supporting the recovery of local wildlife.

In Vitro Culture Laboratory: biotechnology in service of nature.

As part of our commitment to science and innovation, the Villa Domínico Environmental Complex hosts a cutting-edge laboratory dedicated to plant production through advanced biotechnological techniques such as micropropagation.

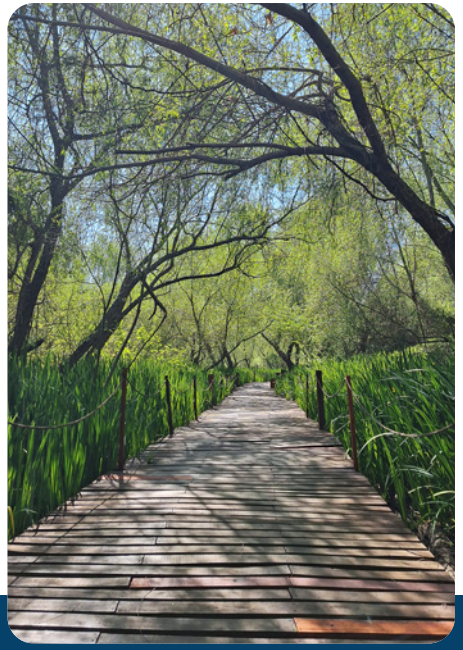
This method allows small parts of a plant (cells, tissues, or organs) to be grown in sterile artificial media under controlled temperature and humidity.

Using this technology, we produce around 5,000 in vitro specimens per year, ensuring efficient and safe propagation of environmentally valuable species.

CIDEC (CEAMSE Research And Development Center).

CIDEC was created in response to a society increasingly based on knowledge and innovation. While CEAMSE has long driven research projects and technological adoption, CIDEC aims to centralize and organize all scientific and technical information while promoting new research initiatives.

Its mission: to continuously improve services and protect the environment.



Environmental monitoring.

Environmental care is a constant priority for CEAMSE. Across all Environmental Complexes, Transfer Stations, and Treatment Plants, the company implements a rigorous Environmental Monitoring Plan to protect natural resources and public health.

This plan includes regular assessments of water (surface and groundwater), soil, air, and gas emissions, as well as monitoring of flora, fauna, untreated and treated leachates, noise levels, and social factors.

In Environmental Complexes, these controls begin before installation, continue throughout operations, and extend for at least 30 years after closure..

Eco Área: conservation, science, and nature.

Located within the Avellaneda Coastal Reserve, the Eco Area is a 40-hectare protected core zone dedicated to preserving natural value, supporting scientific research, and promoting ecotourism.

It serves both as a conservation site and a community recreation space, fostering sustainable activities and environmental awareness.


Villa Domínico
Environmental
Complex

Let's Talk About BIOGÁS

CEAMSE is one of Latin America's leaders in electricity generation from landfill biogas.

Biogas is a gas extracted from landfill modules, composed mainly of 50% methane and 49.9% carbon dioxide, plus trace gases.

Methane forms during the decomposition of organic waste. Proper capture and treatment of this gas are essential to reduce greenhouse gas emissions and environmental impact.

Sovereign renewable energy network.

At the Norte III Environmental Complex, CEAMSE generates 30 MW of electricity — enough to supply about 200,000 inhabitants.

An additional 5 MW is produced at the Ensenada Thermal Plant.

Capturing biogas prevents its release into the atmosphere, reducing global warming while transforming a potential pollutant into a renewable resource — promoting circular economy principles.

How do we generate clean energy?

We can say that energy generation from biogas involves two main processes:

The energy we generate at CEAMSE can be used from Ushuaia to La Quiaca.

1

Gas Extraction and Collection

1a. Gas extraction is carried out through horizontal wells known as trenches.

1b. Perforated pipes are installed inside the trenches, connected to a main pipeline responsible for gas collection.

1c. A suction system using blowers allows the biogas to reach the plant.

1d. The blowers create a vacuum to facilitate the transport of biogas from the module (trenches) to the plant.

Blowers

2

Power Generation

2a. Once at the plant, the biogas arrives with moisture and a temperature ranging between 60°C and 70°C.

60°

2b. A heat exchanger reduces the temperature of the biogas to condense and remove the moisture (water vapor) present in the gas collected from the module.

Heat exchanger

2c. The moisture in the biogas condenses during cooling, producing a liquid known as condensate.

2d. This liquid is captured at the plant and then properly treated at another facility.

2e. Particulate matter and siloxane content are removed in silos containing activated carbon. The gas is filtered, resulting in treated and purified biogas.

Activated carbon silos

2f. This biogas —still primarily methane (CH_4) and CO_2 — is directed to the gensets (generator engines).

Gensets

2g. The biogas enters the combustion chamber (cylinders) of the engine, where the methane gas ignites—just like in any internal combustion engine.

2h. The resulting motion drives the alternator (the generator), which produces the actual electrical energy at low voltage (380 volts).

380V

2i. From the genset, the current passes to a transformer that raises it to medium voltage: 13,200 volts (13.2 kV).

2j. The generated energy is then synchronized with the Argentine Interconnection System (SADI) and transported through an underground duct to the connection point, where it is injected into the national power grid.

Transformer

Camino del Buen Ayre

The Camino del Buen Ayre stretches approximately 23 km, connecting the northern and western areas of Greater Buenos Aires.
It links the municipalities of San Isidro, General San Martín, Tres de Febrero, San Miguel, Hurlingham, Ituzaingó, Moreno, and Merlo.
It includes operational bases at both ends, a Service and Emergency Center, and a Monitoring and Surveillance Center that operates 24/7, allowing early detection of accidents or incidents and immediate assistance to users.

Our Biological Corridor

The Buen Ayre Biological Corridor integrates four parks and one natural reserve, forming an extensive network of green areas and water bodies that preserve representative ecosystems of the region.
These spaces shelter a rich diversity of native flora and fauna.

Through laboratory and nursery reproduction programs, ecological restoration and reforestation with native Buenos Aires species are carried out, helping to restore environmental quality and strengthen biodiversity in the Metropolitan Area.

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