

Legnano Local Green Deal
Plastic packaging waste management for
MSMEs

Municipality of Legnano, Confcommercio Legnano, Aemme Linea Ambiente Srl, ARS ambiente Srl





LOCAL GREEN DEAL in LEGNANO

PREMISE

Legnano is an urbanized city of about 60k inhabitants, historically industrial, now more focused in trade and services but still with an important presence of manufacturing enterprises.

The city is geographically located in the Po Valley, one of the most air polluted areas of the national territory. In part this depends on a very particular geographic configuration to which, however, is associated a very high concentration of urban and manufacturing activities.

In the area around Legnano there are about 300 industrial enterprises, many of which are highly energy consuming and have a strong environmental impact. Commercial and artisanal activities are also widespread with more than 1,500 enterprises. In addition, the strong urbanization and centrality of the city in the "Area Alto Milanese" (Upper Milanese Area) brings with it a very high and increasing traffic concentration over the years.

In recent years, thanks in part to the large amount of funds received from various European, national, and regional sources, the municipality of Legnano has undertaken a path of profound transformation in the direction of environmental sustainability. Most of the investments have been focused on a few crucial areas: the use of renewable energy on the existing municipal housing stock, the progressive transformation of urban mobility, the redesign of public spaces, the reduction of undifferentiated waste and the increase of recycling and recovery of materials based on a strong separate collection with *door-to-door* system.

In the year 2022-2023, on a gradual and experimental basis and for all users in the city (domestic and non-domestic), individual waste production measurement was introduced with punctual measurement of the amount of unsorted waste fraction produced by each user. This has generated a substantial redistribution of the waste produced to the benefit of the sorted portion and with a decrease in the unsorted portion. As of 1/1/2024, the individual measurement was included in the waste tariff (TARI) calculation according to the "pay as you throw" (PAYT) principle. The PAYT tariff (TARIP) project aims to exceed 80% waste differentiation to achieve the objectives set by the regional waste plan approved in 2022.

The LGD dedicated to plastic packaging waste management for MSMEs is part of the Legnano municipality's strategy to give, in cooperation with Aemme Linea Ambiente (the public company specialised in waste management and urban hygiene services in the Alto Milanese Region) a further boost to waste differentiation.

An extensive and active participation of private stakeholders (waste management experts and local companies) is a prerequisite for the effectiveness of the LGD.

The municipality of Legnano intends to use the Local Green Deals "Plastic packaging waste management for MSMEs" as a **strategic governance approach** to accelerate sustainability action at the local level, in line with the goals of the European Green Deal.





The municipality of Legnano seeks to sign **individual LGDs** to implement its sustainability strategy named "Urban Regeneration" (PNRR - MISSION 5 - COMPONENT 2 - INVESTMENT SUB-INVESTMENT 2.1) and to reach its stated goals.

The present LGD is designed with the following role of the municipality of Legnano and will define each signatories' contributions accordingly in the subsequent sections.

City as contributor (e.g. City-to-Business).

i.e. The local government is an active contributor to measures committed to by one or more businesses, NGOs, municipal companies, or business intermediaries, like Chamber of Commerce, business associations, etc



Local Green Deal between Confcommercio Legnano, Aemme Linea Ambiente Srl, ARS ambiente Srl and the Municipality of Legnano

1. Scope of the Local Green Deal

Improving waste management and waste separate collection is essential for protecting the environment, conserving resources, enhancing public health, and creating economic opportunities. By adopting better waste practices, communities can reduce their ecological footprint and contribute to a more sustainable and resilient future.

The interest of companies in the topic of proper waste management and more generally in the concept of circular economy has greatly increased in Italy in recent years, however there is still a significant gap between large and small companies among which a great deal of scepticism still prevails.

Waste management can represent a significant challenge for MSMEs, for many reasons including the lack of the necessary infrastructure and resources to properly manage waste; the complexity of regulations to be compliant with (particularly for plastics and packaging); the cost of waste management and disposal that can be a significant burden; the lack of knowledge to properly evaluate the importance of waste separation or the specific procedures for recycling non-domestic packaging materials.

These challenges make waste management a complex issue for MSMEs, requiring better education, support from local authorities, and easier access to compliant waste management services.

When we talk about non-domestic plastic packaging waste, we refer to plastic materials used in industrial, commercial, or production settings to package, protect, transport, or display products. These wastes include plastic films, containers and polystyrene, originating from activities such as logistics, distribution, and manufacturing. Unlike household plastic waste, they are subject to specific regulations aimed at ensuring proper recovery, recycling, or disposal, thereby reducing environmental impact and supporting a circular economy.

These materials are bulky and lightweight, making them difficult to handle and store. In addition, they are often contaminated with chemical residues, dust, or organic matter, complicating recycling processes.

MSMEs in Italy typically handle non-domestic plastic packaging waste through various channels depending on their size, location, and compliance with regulations: many companies participate in the separate collection system managed by local municipalities or private operators; in other cases, certified private contractors are involved. These companies handle collection, transportation, and recycling or disposal of plastic packaging waste.

But there is a risk that non-domestic plastic packaging waste may end up in unsorted urban waste if companies do not manage it properly. While regulations encourage separate collection and recycling, small businesses



often face challenges, such as limited space for sorting, lack of resources to handle waste, or insufficient awareness about recycling practices.

As a result, if the waste is not properly segregated at the source or collected by authorized services, it could be mistakenly sent to the general waste stream, which hinders recycling efforts and contributes to environmental pollution. All these types of plastic waste (called "traccianti" ("tracers"), if disposed of by companies in domestic waste sorting, compromise their quality.

The "Plastic packaging waste management" LGD is aimed to improve the results in sorting and decreasing undifferentiated waste by also reducing the recoverable fractions still present in the so-called undifferentiated dry waste, among which plastic packaging stand out.

From a sectorial point of view, the planned LGD is something between "Construction and Building" and "Renewable energy".

The implementation of proper plastic packaging waste management LGDs can offer several benefits to MSMEs:

<u>Cost Savings</u>: efficient waste management, including recycling and reducing plastic waste, can lower disposal costs.

<u>Compliance with Regulations</u>: with stringent environmental regulations, particularly regarding waste disposal and recycling, an effective system helps small businesses stay compliant. Adhering to legal requirements reduces the risk of penalties or fines. Businesses that comply with environmental standards may also gain access to subsidies, tax breaks, or other financial incentives.

Improved Reputation: customers are increasingly concerned with sustainability and environmental responsibility. Small businesses that adopt effective waste management practices, including recycling plastic packaging, can enhance their reputation as environmentally responsible entities. This can lead to increased customer loyalty and attract eco-conscious consumers.

<u>Contributing to the Circular Economy</u>: by ensuring that plastic packaging is properly recycled, small businesses contribute to the circular economy. Recycling helps turn waste into a resource, reducing the need for virgin materials, which can improve the sustainability of the business's supply chain.

<u>Operational Efficiency</u>: a streamlined waste management system can lead to greater operational efficiency. By organizing waste disposal processes and reducing waste generation, businesses can optimize space and reduce clutter, leading to a more efficient and organized workplace.

The activity of project development and stakeholder involvement took place in several stages over a time horizon of approximately 7 (seven) months.



Meetings with each of the partners have been organized in order to present and drive the initiative: initially, meetings were held mainly to illustrate the project and share the general framework and macro-objectives; afterwards several more specific meetings were held for discussion and fine tuning to agree, step by step, on segmentation, objectives and methodology. Altogether, in five months, there were about 20 meetings with the different partners involved in the LGD waste management project.

The agreed working methodology used in these months, up to the signing of the LGD was as follows:

- Mapping of enterprises by sector, activity, turnover, number of employees, etc. in order to have a general view of the local productive environment.
- Identification, through analysis of literature data and open discussions with technicians and specialists of the "state of art" and the most critical elements concerning plastic packaging waste management in MSMEs.
- 3. Organisation and management of Focus Groups and One-to-One Interviews on a sample of enterprises (selected by Confcommercio Legnano) in order to verify the preliminary hypotheses, identify new areas of investigation and segmentation variables, gather suggestions and opinions, identify possible barriers.
- 4. Discussion with potential partners about their possible contribution and support in terms of know-how, expertise, time and cost sharing.
- 5. Prepare a high-level project plan, as follow:
 - Verification (through random sampling) of plastic packaging waste presence in differentiated and undifferentiated municipal waste.
 - Benchmarking with literature and experimental data.
 - Measurement of waste collection potential in the local territory.
 - Analysis of collection flows.
 - Benchmarking of flows.
 - Development of proposal for a new service dedicated to Plastic packaging waste collection.
 - Verification of possible savings/increased revenues/costs.
 - Implementation of a survey (Confcommercio Legnano members) to collect quantitative data and verify willingness to join the new service offer.
 - Service implementation.



Partners to the Local Green Deal

Partner 1: Confcommercio Legnano

Organization type: Employers' association

Confcommercio sustainability objective, in the context of the LGD, is to support the associated enterprises to improve plastic waste collection and accordingly help them to save costs, comply with regulations, enhance sustainability, and strengthen their market position, all while contributing to broader environmental goals.

Confcommercio Imprese per l'Italia (Italian General Confederation of Enterprises, Professional Activities and Self-Employed Work) is the largest business organisation in Italy, associating more than 700,000 enterprises. With its articulated and widespread membership system, Confcommercio Imprese per l'Italia protects and represents its member companies vis-à-vis the institutions. These are the enterprises in commerce, tourism, services, transport and logistics, culture and the professions, which account for over 50% of employment in the country.

In order to qualify and strengthen the sustainable commitment of its entrepreneurial network, in 2022 Confcommercio launched Imprendigreen, an initiative consisting of a series of tools and services designed to accompany and enhance the value of businesses on the path of ecological transition. The aim is to raise awareness and consolidate the sustainable commitment of the business sector, rooting in the territory an awareness that can be a driving force for companies in the context of the ecological transition underway.

Established in 1945, Confcommercio Legnano represents Confcommercio Milano-Lodi-Monza Brianza in the Legnano area and offers many and varied services (legal, safety at work, tenders, accounting, credit facilities, social security consulting, etc.) to local MSMEs operating in commerce, tourism, services and the professions. The Association represents almost 800 members operating in the municipalities of the Upper Milanese area (Legnano and other 8 municipalities).

Confcommercio Legnano is a recognised and accredited institution in the local business world, and thanks to its high regard and trust among the companies in the area, it is a strategic reference point for the project. And it will be essential to promote the implementation of the LGD among the associated enterprises.



Partner 2: Aemme Linea Ambiente Srl

Organization type: Public company

Aemme Linea Ambiente (ALA), subsidiary of the AMGA Spa Group, is the public company that deals with urban hygiene over a territory of over 300 thousand inhabitants in the Alto Milanese area. The company provides services such as waste collection, street cleaning, and the management of recycling centres for several municipalities, including Gallarate, Magenta and Legnano.

ALA places a strong emphasis on sustainability, employing zero-emission electric vehicles to minimise air and noise pollution. This approach aligns with broader goals of promoting sustainable urban mobility.

Customer feedback has generally been positive, highlighting effective organisation at recycling centres, cleanliness of public market areas, and reduced noise from collection vehicles.

ALA has been involved in the LGD in order to evaluate the possibility to implement a dedicated service to properly collect and manage the Plastic packaging waste from MSMEs and as a consequence improve the quality of recyclable plastic and reduce contamination of undifferentiated waste.

In addition, with a more organized and comprehensive collection system, ALA can divert higher-quality plastics for specialized recycling, while minimizing the volume of mixed waste. This leads to improved operational efficiency, lower processing costs, and a reduction in the volume of waste that must be incinerated.

Last but not least, for a public entity like ALA, demonstrating effective and responsible waste management, particularly in the industrial sector, can enhance its public image. Effective recycling initiatives are seen as a positive step towards environmental responsibility, boosting trust among the communities it serves



Partner 3: ARS ambiente Srl

Organization type: Private Company

ARS ambiente Srl is an Italian company (SME) specialising in consultancy and design for sustainable waste management and the circular economy.

Founded in 2001 and based in Gallarate (VA), it operates in key areas such as separate waste collection, the design of waste treatment facilities, and technical-legal consultancy for public authorities and private enterprises.

ARS ambiente provides tailored solutions to optimise waste management processes, aiming to increase recycling rates while reducing service costs. In addition, it offers institutional support (to local and regional authorities) and advice on "pay-as-you-throw" (PAYT) schemes and tariff systems.

ARS ambiente is also involved in promoting research and innovation projects within the waste management sector, collaborating with universities and national (CIC-Consorzio Italiano Compostatori - member of ECN-European Composting Network, Assorecuperi, Utilitalia) and international organisations such as the ISWA (International Solid Waste Association) or JRC-Joint Research Centre in Ispra (VA). This multidisciplinary approach positions it as a key player in Italy's environmental management sector.

ARS ambiente has been involved in the project because, by leveraging on its multidisciplinary expertise, can play a central role in supporting Aemme Linea Ambiente to design and implement an effective, sustainable, and regulatory-compliant waste management system for non-domestic plastic packaging waste.

In addition, ARS ambiente can gain strategically and reputationally from contributing to the industrial plastic waste management LGD while reinforcing its role as an innovator in sustainable environmental solutions.



Supporting Partner: CONAL

Organization type: Private Consortium

CONAI-Consorzio Nazionale Imballaggi (National Packaging Consortium) is a private non-profit Consortium (established in 1997) that is the instrument through which the producers and users of packaging in Italy ensure that the objectives of recycling and recovery of packaging waste required by law are achieved. It plays a crucial role in Italy's waste management and recycling system, working to improve the sustainability of packaging materials and ensure compliance with environmental regulations.

CONAI operates a nationwide system for the collection and recycling of packaging materials such as plastic, paper, glass, metal, and wood. It works with local municipalities, waste management companies, and businesses to ensure that packaging waste is correctly disposed of and recycled. At international level, CONAI is a member of Expra, the Alliance for Extended Producer Responsibility, which is the European umbrella organisation representing non-profit packaging and packaging waste management systems.

CONAI's goal is to reduce the environmental impact of packaging waste, minimize landfill use, and increase recycling rates. It contributes to Italy's compliance with European Union waste reduction targets.

CONAI has been involved in the project to support, through the financing of a specific study targeted at the Legnano area, the analysis of the most critical issues concerning the management of Plastic packaging waste by MSMEs.

CONAI's involvement in the LGD targeted to improve industrial plastic packaging waste collection is fully coherent with its goals of boosting recycling rates, supporting the circular economy, ensuring regulatory compliance, and enhancing the overall sustainability of packaging waste management in Italy.





3. Specific measures and monitoring

Municipality of Legnano commits to:

Scope/sector	Plastic Waste Management
Action	Support ALA in the evaluation and development of a service for the collection and disposal of plastic packaging waste from non-household users. And in measuring the effects on the tariff currently in place.
Target	Improve, in terms of quality and quantity, the undifferentiated (and differentiated) collection of municipal waste in the territory; with effects on the overall costs of collection and disposal and consequently on the rate charged to citizens and companies.
Impact ¹	Percentage of plastic packaging in undifferentiated waste.
2	Reduction (%) of undifferentiated waste collection.
	Reduction (%) of residual recyclable materials in undifferentiated waste.
	Reduction in undifferentiated waste treatment costs. treatment costs.
Contribution by third party/ stakeholders (optional)	CONAI: support the analysis of the most critical issues concerning the management of plastic packaging waste by MSMEs
Cost estimation	
Funding source	☐ Private ☐ Public □EU Funding □ Other (please specify)
Timeline/ Deadline	December 2025
Monitoring activities	The action will be monitored by the municipality on the achievement of the KPIs. A bimonthly report will be produced containing the following information:
	- Name LGD and Date
	- Activities carried out
	- KPI assessment (after implementation of the service)

Confcommercio Legnano commits to:

¹ Please quantify the impact to the greatest extent possible. You may want to use the Input-Output-Outcome-Impact model or similar for impact measurement.



European Commission



Scope/sector	Plastic Waste Management
Action	Promote the initiative to Confcommercio associated companies by organizing talks and discussion meetings and sending information materials. Promote among member enterprises the new service, so that they can evaluate availability and convenience.
Target	A sample of associated companies (selected by Confcommercio Legnano) potentially interested to the new service offer (if available and convenient).
Impact	Number of associated companies joining the new service. Percentage of plastic packaging in undifferentiated waste. Reduction (%) of undifferentiated waste collection. Reduction (%) of residual recyclable materials in undifferentiated waste.
Ð	Reduction in undifferentiated waste treatment costs.
Contribution by third party/ stakeholders (optional)	CONAI: support the analysis of the most critical issues concerning the management of plastic packaging waste by MSMEs
Cost estimation	No cost
Funding source	□ Private □ Public □EU Funding □ Other (please specify)
Timeline/ Deadline	December 2025



Aemme Linea Ambiente Srl commits to:

Scope/sector	Plastic Waste Management
Action	Make available data, human resources and expertise to assess the feasibility of implementing a new collection service for non-domestic packaging plastics. Implement the service if sustainable and cost-effective.
Target	Reduce the presence of plastic material in unsorted waste and improve the quality of sorted plastic waste through a reduction of non-compliant material. With benefits on treatment costs and disposal and recycling prices.
Impact ²	Reduction (%) of residual recyclable materials in undifferentiated waste. Reduction (%) of plastic packaging in unsorted waste. Reduction (%) of non-compliant material in sorted plastic waste. Reduction in undifferentiated waste treatment costs. Number of companies using the service.
Contribution by third party/ stakeholders (optional)	CONAI: support the analysis of the most critical issues concerning the management of plastic packaging waste by MSMEs
Cost estimation	
Funding source	□ Private □ Public □EU Funding □ Other (please specify)
Timeline/ Deadline	December 2025

² Please quantify the impact to the greatest extent possible. You may want to use the Input-Output-Outcome-Impact model or similar for impact measurement.



ARS ambiente Srl commits to:

Scope/sector	Plastic Waste Management
Action	Conduct a local territory analysis to measure the problem of collection of plastic packaging waste from non-domestic users and to assess the feasibility of a new collection service for plastic packaging waste expressly dedicated to businesses.
Target	Complete, by July 2025, the territorial study and produce a report (including the economic and financial component), to be used for the design and implementation of the new collection service by Aemme Linea Ambiente. The individual activities planned are:
	 waste characterization. data analysis of plastic production by non-domestic sources. evaluation of organizational and management options.
Impact ³	Preparation of a final report of the research results to be used as the basis for one or more scientific-dissemination publications.
Contribution by third party/ stakeholders (optional)	CONAI: support the analysis of the most critical issues concerning the management of plastic packaging waste by MSMEs
Cost estimation	25 k € (financed by Conai)
Funding source	⊠ Private □ Public □EU Funding □ Other (please specify)
Timeline/ Deadline	July 2025

³ Please quantify the impact to the greatest extent possible. You may want to use the Input-Output-Outcome-Impact model or similar for impact measurement.



Legnano, 18.02.2025

Comune di Legnano

[II Sindaco]

Larray Collins

Confcommercio Legnano

[il Presidente]

Paolo Ferrè

Aemme Linea Ambiente

[II Direttore Generale]

Stefano Migliorihi

ARS Ambiente

[L'Amministratore Unico]

Giorgio Ghiringhelli