

LIFE BIOBEST

GUIDING THE MAINSTREAMING OF BEST BIO-WASTE RECYCLING
PRACTICES IN EUROPE

D3.4: Country Factsheets on the analysis of communication and engagement practices

WP3: Set of Guidelines

T3.4: Analysis of communication and engagement practices

JUNE 2024

Public Report



Co-funded by
the European Union

LIFE21-PRE-ES-LIFE BIOBEST – 101086420

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Document citation: Jourdan, M. & Favoino, E. (2024). *LIFE BIOBEST D3.4 – Factsheets on the analysis of best practices in communications and engagement.*

In-text citation: (Jourdan & Favoino, 2024)



N°1: Factsheet on Exemplary Communication and Engagement Strategies for bio-waste collection | Italy: Focus on Parma

Italy has a long-standing track record in separate collection of bio-waste, whose obligation was anticipated by the national government to 1 January 2022. While collection of kitchen waste is common in small Italian municipalities, the country also hosts a few remarkable examples of separation of kitchen waste in big cities such as Parma. Parma's door-to-door (D-t-D) waste management system stands out as a prime example of how proficient communication strategies support the achievement of good results.

Utilising a range of communication channels, Parma ensured accessibility and understanding of the key pieces of information across its population. Creative approaches like video clips and school contests further enhanced awareness and participation. Incentives such as variable charging schemes and rebates further reinforced positive behaviours, making Parma's waste management programme a model for other regions seeking to implement a successful separate collection of bio-waste.

PARMA

Population (inhab.)	Density (inhab./km ²)	Type
198,292 (2020)	760	Urban

Background elements

Parma adopted D-t-D collection, including separation of kitchen waste, throughout 2012-2013. This was followed in 2015 by the introduction of a PAYT scheme, which was designed based on the number of set-outs of residual waste - how many times a household puts out the residual waste bin per year. The scheme has, ever since, made Parma into one of top performers in recycling among cities of a similar size across Italy and Europe.

Parma is host to many domestic and international students, as well as immigrant workers, which necessitates communication with foreign communities, in the case of waste collection services just as in any other angle of the municipal services.

Bio-waste collection model

The system involves D-t-D collection of kitchen waste, utilising either caddies or 2-wheeled bins depending on the building type. Detached houses typically use caddies, while high-rise buildings accommodating many households use bins. At home, residents employ vented kitchen caddies and compostable bags to initially collect and store kitchen waste. Once these bags are full, they are placed into larger caddies or bins, which are then set out at the D-t-D on designated weekly collection days.

In line with most Italian waste management programmes, garden waste is not mixed with kitchen waste. Instead, it has its own separate collection scheme, which involves large road containers or Municipal Recycling Centres.

Regarding the hardware aspect of the system, essential tools (collection kits) required for participation in the scheme are provided and regularly replenished by the municipality. For bio-waste, this includes an annual supply of compostable bags provided free of charge to residents. Additionally, vented kitchen caddies and wheeled bins are supplied at no cost.



Image 1. Vented kitchen caddy (right hand) and (inside it) compostable bags used for collection of kitchen waste; tagged caddies (centre) and tagged bags (left) adopted to collect residual waste, under a variable charging scheme (PAYT; the delivery of one bag/bucket is detected through receivers and displayed on the square tool).

Best Practices description

1. Population and stakeholder engagement

One fundamental change brought in by the new scheme was shifting from “bring systems” (based on large road containers) towards D-t-D collection. Various activities involving stakeholders and the population were conducted to maintain

high levels of commitment and address any issues, before, during and after the implementation of the D-t-D scheme.

- Initially, **25 public meetings** were organised across different neighbourhoods, with participants including members of local associations, schools, foreigners, and condominium administrators.
- A **dedicated programme targeted local businesses**, including monthly meetings on D-t-D collection effectiveness. Feedback from these meetings, such as concerns raised by bars and restaurants in the city centre about limited space, led to adjustments by the waste management company IREN, including increased bio-waste collection frequency.
- **Ongoing consultation programmes** with citizens and businesses were facilitated by appointed waste officers (*informatori*) during the delivery of new tools, such as the recent replacement of initial used bags for residual waste with caddies in the city centre.



Image 2. Front page of the booklet for foreigners.

Source: Parma [website](#)

2. Awareness-raising activities and challenges

Outreach and communication were deemed essential for the scheme's effectiveness, with communication/education regarded as the "software" complementing the "hardware" of the system. The involvement of city officials, local associations, and testimonials, including the mayor and deputy mayor, emphasised the importance of behavioural change. Transitioning from "bring systems" to D-t-D collection required dedicated communication efforts, such as the creative video, [the funeral of the last road container](#), involving prominent sport clubs and associations.



Image 3. Screenshot from video clip “the funeral of the last road container”.

Source: YouTube [video](#)

According to local decision-makers, one of the most effective awareness-raising initiatives was the project targeting all schools of Parma, titled "[Rifiuti? Risorse!](#)" (which may be translated to “waste? nope, resources!”). Which was carried out in cooperation with a local association of citizens, and all the students’ population starting from kindergarten to universities were involved in a contest, which awarded every year the best performance, at various educational levels, in separating waste, across all schools/universities in the city.

Addressing turnover in the population, particularly due to immigrant workers and university students (which are roughly 10% of the total population), required targeted actions, such as producing multilingual materials and prioritising digital communication channels alongside traditional methods:

- Given the “digital native” nature of students, a particular attention was paid to digital communication (social media, dedicated apps and internet portal), besides the traditional ones (tv, press, letter from the mayor, flyers, canvassing, above all during the delivery of tools, temporary and permanent info points, contact centre).
- On its [website](#) the city provides all needed information to households and businesses. The site includes links to the following:
 - A **practical guide to separate collection**, which includes all basic instructions, various channels (e.g. toll-free telephone numbers, dedicated apps and websites, information desks, and related contact details) to get more info from the city or the waste management company.
 - A **booklet for foreigners**, titled Separate Collection Speaks All Languages, with **basic instructions in 6 different languages** (besides Italian) and references to other channels to get more details.



3. Participation and economic benefits

Participation in the scheme, which is stipulated as mandatory by the municipal waste regulation, also brings economic benefits for the participating households and businesses. The adoption of a variable charging scheme (PAYT) based on the number of set-outs of residual waste, implies savings for those who separate most and by default generate less residual waste. Furthermore, an additional rebate of 12% is granted to households who practice home composting.

4. Impact & outcomes

The combined effect of the scheme's implementation and educational programmes resulted in a reduction in waste generation and increased separate collection levels, positioning Parma as a reference for cities of similar size.

Key results

<p>Change in participation</p>	<p>The scheme was rolled out to cover 100% of the population and large producers (e.g. hotels, restaurants and catering businesses – Ho.Re.Ca. – greengroceries, bakeries, etc.). The reduced collection rounds for residual waste and introduction of a PAYT scheme, made the participation rate near 100% (apart from households practising home composting)</p>
<p>MSW separate collection rate</p>	<p>Notable progression over the years:</p> <ul style="list-style-type: none"> • 2011 - 46% • 2015 - 71% (following the full implementation of D-t-D collection) • 2021 - reached 82% (with the combined implementation of D-t-D collection and PAYT systems)
<p>MSW generation per capita (2022)</p>	<p>562 kg/inhab./yr A reduction of 4.42% compared to 2011, before implementation of D-t-D and PAYT, which was 588 kg/inhab./yr</p>
<p>Residual waste generation per capita (2022)</p>	<p>106.23 kg/inhab./yr</p>
<p>Bio-waste collection per capita (food waste only)</p>	<p>97.43 kg/inhab./yr</p>



Impurities in bio-waste (% of weight)

3.2% impurities (in kitchen waste)
(source: compositional analysis performed
by CIC)

Lessons-learned

- **Stakeholder engagement** in a variety of activities throughout system deployment is essential. Organising public meetings and dialogue with local associations, schools, businesses and officials ensures a high level of commitment and enables critical issues to be dealt with quickly, thereby boosting confidence in the system.
- Moreover, **establishing regular consultation programmes** with citizens and businesses facilitates ongoing feedback collection and problem-solving. Dedicated waste officers can for example engage with households and businesses, address concerns, and gather insights for continuous improvement.
- **Tailored communication** to diverse audience groups is necessary, especially in culturally diverse cities like Parma. Providing information in multiple languages and addressing specific needs, such as those of immigrant workers and international students, helps ensure inclusivity and effectiveness of communication efforts.
- **Providing accessible and comprehensive information through various channels** is important to guarantee meaningful understanding and participation of all population segments. Utilising websites, practical guides, booklets in multiple languages, and digital platforms ensures information accessibility to diverse audiences.
- **Employing creative and engaging communication methods can enhance awareness and participation.** Initiatives such as video clips, contests in schools, and community events make waste management schemes more relatable and encourage active involvement.
- **Implementing incentives and rewards** is a complementary instrument to motivate participation and compliance with waste management regulations, such as the PAYT charge and the rebate of 12% granted to households practicing home composting.



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