



This project is funded by the European Union  
and the Republic of Türkiye.

## Technical Assistance for Assessment of Türkiye's Potential on Transition to Circular Economy EuropeAid/140562/IH/SER/TR

### Activity 3.3.1. Zero Waste Management System Practices Workshop

Waste Prevention and Reduction Strategies and Good Practice Examples from the EU

Antalya, 5-7 November 2024

Onur Akpulat, Deputy Team Leader

# EU WASTE FRAMEWORK DIRECTIVE

## SECTION 5 - PLANS AND PROGRAMS

### ARTICLE 28 - WASTE MANAGEMENT PLANS

### ARTICLE 29 - WASTE PREVENTION PROGRAMMES

### ARTICLE 30 - EVALUATION AND REVIEW OF PLANS AND PROGRAMS

- Should be integrated into **waste management plans** required under Article 28, or
- Integrated into **other environmental policy programmes, or**
- Developed as **separate programmes.**
  
- **Waste prevention objectives and measures** should be clearly defined. The objective of these targets and measures is **to break the link between economic growth and waste generation and associated environmental impacts.**
- Member States shall adopt **specific food waste prevention programmes** as part of their waste prevention programmes.
- Member States should evaluate their waste management plans and waste prevention programmes **at least every six years and revise them in accordance.**
- **Every two years, the European Environment Agency** publishes a report for the Member States and the Union on the review of progress made in the completion and implementation of waste prevention programmes, the prevention of waste generation, the decoupling of waste generation from economic growth and the assessment of progress in the transition to a circular economy.

# NUMERICAL REDUCTION TARGETS FROM EU COUNTRIES



## NETHERLANDS

- **Total amount of waste** not to exceed **63 million tonnes** by 2029
- Reduction of **primary material input** by **50 %** by 2030
- Reduction of **per capita food waste** by **50 %** by 2030 compared to 2015
- Recovery of **90%** of **plastic bottles** through the deposit return system
- **Using 20 % less plastic** by 2024 compared to 2017



## GERMANY

- **70% of all beverage containers** to be **reusable/refillable** by 2022
- **Halving per capita food loss** at retail and consumer level and reducing food losses in production and supply chains by 2030



## SWEDEN

- Increasing **the proportion of reusable packaging** placed on the market **by at least 20 %** from 2022 to 2026 and **by at least 30 %** from 2022 to 2030
- Reduction of **food waste per capita** by **at least 20 %** from 2020 to 2025
- **Increasing the share of food production** reaching markets and consumers by 2025

# NUMERICAL REDUCTION TARGETS FROM EU COUNTRIES



## LITHUANIA

- **Circular material utilisation rate:** no less than the EU average in 2025 and 2027
- **Municipal waste per capita:** Below the EU average in 2025 and 2027
- **Proportion of municipal waste landfilled:** 15% in 2025 and 8% in 2027
- **Waste sector greenhouse gas emissions:** Compared to 2005: Reduction by 51 % in 2025 and 61 % in 2027



## ROMANIA

- Reduction of **household waste per capita** by 10 % by 2025 compared to 2017
- The **increase in the amount of packaging waste** shall be at least 10 % less than the GDP growth in 2025 compared to



## ESTONIA

- **Increase in municipal waste generation** to be at most 50 % of the increase in GDP
- The **increase in packaging production** to be at most 2/3 of the increase in GDP



## SLOVAKIA

- Reduction of the amount of **mixed municipal waste** by 50 % by 2025 compared to 2016
- Reduction of the amount of **biodegradable waste in mixed municipal waste** by 60 % by 2025 compared to 2016



## CZECHIA

- **Reduction of per capita** consumption of single-use plastic beverage cups and food containers in 2026 compared to 2022

## NATIONAL ANTI-WASTE LAW 2020

### Numerical Waste Prevention Targets

- To reduce the amount of **household waste generated per capita** by **15 %** in 2030 compared to 2010
- To reduce the amount of **waste generated** from economic activities, particularly **from the construction sector**, per unit of value produced by **5 %** in 2030 compared to 2010
- To reach a **reuse** rate equivalent to **5 %** of the amount of household waste in 2030
- **Re-used packaging** on the market to reach **5 %** in 2023 and **10 %** in 2027
- To reduce food waste in **food distribution and catering** by **50 %** by 2025 compared to 2015 and in **consumption, production, processing and commercial catering** by **50 %** by 2030 compared to 2015
- **Eliminate the sale of single-use plastic packaging** by 2040
- **To reduce** the number of single-use plastic beverage bottles placed on the market **by 50 %** by 2030

## NATIONAL ANTI-WASTE LAW 2020

Rouge :  
0 à 1,9



Orange :  
2 à 3,9



Jaune :  
4 à 5,9



Vert clair :  
6 à 7,9



Vert foncé :  
8 à 10



## Implementation

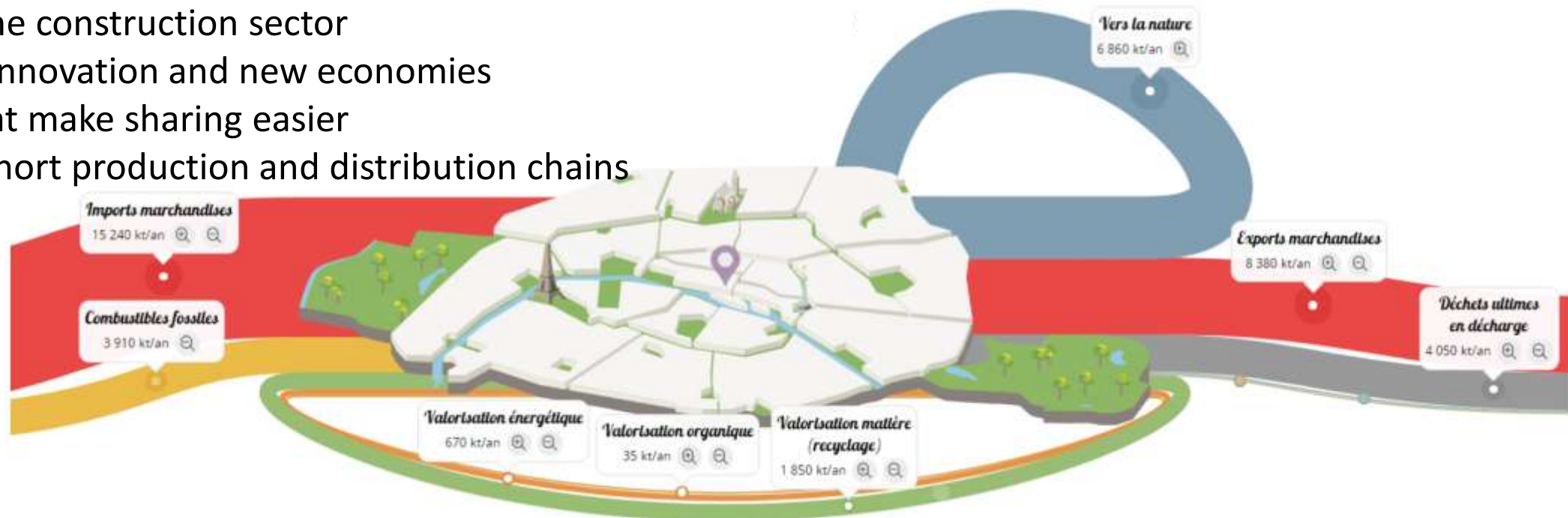
- **Food waste** in France decreased by **10%** between 2016 and 2020 (9 million tonnes in 2020 compared to 10 million tonnes in 2016)
- The 2015 Energy Transition for Green Growth Act strengthens the fight against **planned obsolescence** and encourages **the extension of the useful life of products**. The legal penalty for planned obsolescence is **two years in prison** and a **fine of 300,000 euros**.
- Since 2021, a **Repairability Index** has been in place for **9 categories of electrical appliances** (washing machines, dishwashers, vacuum cleaners, high-pressure washers, smartphones, laptops, TVs and electric lawnmowers), with products being rated from 1 to 10.
- The law mandated the establishment of **two new funds** for innovative financing of repair and reuse: "**Repair Fund**" and "**Re-use Fund**", **dedicated to financing non-warranty repairs and re-use** of EEE, furniture, textile clothing, footwear and home textiles, toys, sports and leisure goods, DIY and garden items. The consumer must have the product repaired in a **certified repair workshop** in order to receive a contribution that reduces the repair price. The repair fund is established by the organisations authorised under the relevant **EPR**. The Reutilisation Fund aims to finance **associations and enterprises operating in the social and solidarity economy**. **At least 5%** of the contributions received by producer responsibility organisations are allocated to this fund.

# PARIS, France: Good Practice Example

## PARIS CIRCULAR ECONOMY ACTION PLAN

### Current Situation Assessment

- Control of the food supply chain
- Combating food waste and recovering organics
- Visibility of the supply chain of goods (origin and logistics organisation)
- Impacts of the construction sector
- Support for innovation and new economies
- Solutions that make sharing easier
- Prioritising short production and distribution chains



# PARIS, France: Good Practice Example

## PARIS CIRCULAR ECONOMY ACTION PLAN

### Targets

- Reduction of **food waste** by up to **50 %** by 2025
- Reduction of **municipal waste** by **10 %** by 2025
- **Minimisation** of waste sent to **incineration** and **maximisation** of its **value as a resource**
- **100%** recycled paper in public procurement by 2020
- Separation of **all plastic packaging** by 2019
- **Elimination** of the use of single-use plastic containers, cups and plates by 2017





# PARIS, France: Good Practice Example

## IMPLEMENTATION AND RESULTS

### Economy

- The circular economy currently **employs 66,500 people** in full-time jobs, representing **2.9 %** of jobs in Paris and generating an annual value of **7.8 billion USD**.

### Social

- The Municipality of Paris has supported **19 non-profit organisations**, each receiving a subsidy of **€500,000** to equip them with the logistics, kitchen equipment and other supplies necessary to take back unsold food from supermarkets and redistribute it to vulnerable or low-income communities.

### Infrastructure

- **30,000 new container** sets from door to door → one container **every 100 metres** + **554 bulk compost sites**
- **15 Re-use Centres** in each district where unwanted/defective items are repaired, taught how to repair them and sold to low-income citizens at low prices

### Awareness

- Annual **recycling parties** with comedy, music and lectures at the Reuse Centre



Source: Municipality of Paris, 2019. <https://cdn.paris.fr/paris/2019/07/24/38de2f4891329bbaf04585ced5fbdf0f.pdf>  
C40, 2024. [https://www.c40knowledgehub.org/s/article/Cities100-Paris-is-reducing-reusing-and-recovering-its-waste?language=en\\_US#:~:text=The%20City%20of%20Paris%20has,and%20recycle%20and%20recover%20waste](https://www.c40knowledgehub.org/s/article/Cities100-Paris-is-reducing-reusing-and-recovering-its-waste?language=en_US#:~:text=The%20City%20of%20Paris%20has,and%20recycle%20and%20recover%20waste) .

# PARIS, France: Good Practice Example

## PARIS SUSTAINABLE FOOD STRATEGY



**Contribute to changing the nutritional balance of the population towards a "flexitarian" diet,** a diet that is rich in fruit and vegetables with less meat and fish and that has a reduced impact on the environment



**Reduce the rate of obesity** in Paris from 10.7% in 2017 **to 5%**, with targeted action in priority neighbourhoods

**Eliminate food insecurity.** People in situations of food insecurity still represent 6.3% of the population in 2016



**Expand transport by electric vehicles, bikes, on-foot and by river** for the food supply

In addition, **in local government-operated canteens and restaurants**, the City of Paris will increase the proportion of **sustainable food to 90% by 2050**.

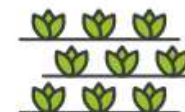
## PARIS COMMITS TO A MORE SUSTAINABLE, MORE INCLUSIVE, MORE RESILIENT FOOD SYSTEM

To demonstrate the ambition of its plans and to concretely translate its determination, the City of Paris commits, **by 2030**, to:



**Increase** the share of **food consumed in Paris and produced in the Paris Basin to 50%**, compared to 25% currently

**Mobilize** the key players in the Paris region (Ile-de-France) to **reach a target of 20% of agricultural land dedicated to organic agriculture**, compared to 2.7% in 2017



**Increase** the share of **agricultural land in the Paris region to 50%**

**Decrease** the region's "food" **carbon footprint by 40%**



**Stimulate 75%** of Parisian households to regularly buy **organic products**

Source: The Municipality of Paris, 2018. [https://www.api-site.paris.fr/paris/public/2018%2F9%2FENG\\_Abrege\\_StratAlim.pdf](https://www.api-site.paris.fr/paris/public/2018%2F9%2FENG_Abrege_StratAlim.pdf)

# PARIS, France: Good Practice Example



PARIS 2024



## PARIS 2024 OLYMPIC AND PARALYMPIC GAMES

- By utilising **95%** of the existing infrastructure and temporary spaces, less construction and less resource use, and a reduction in the number of furniture **from 800,000 to 600,000**.
- The use of **single-use plastics has been banned** during the Games and festivals hosted by the Municipality of Paris. "Marathon for All" eliminated the need for approximately **400,000 plastic bottles**.
- All containers and cups of food and beverages consumed are **reusable** and **must be returned when leaving** the area. **Organic, seasonal and local products** are prioritised in the games.
- Water bottles will be accepted in all festival and competition areas, except glass or bottles larger than 75 cl. **Municipal fountains will be available free of charge at all venues**.
- **Drinks without plastic bottles** can be purchased at eight competition venues in Paris. Coca-Cola, the Games' global beverage partner, has allocated **nearly 100 beverage fountains** and reusable cups, **saving more than 100 tonnes of single-use plastic bottles**.



# LJUBLJANA, Slovenia: Good Practice Example



## Ljubljana Circular Economy Strategy 2021-2027

## Circular Economy Good Practice Examples



Mestna občina Ljubljana

Home > My Ljubljana > Environmental protection > On the way to a circular economy > Examples of circular economy in the Municipality of Ljubljana

### Examples of circular economy in the Municipality of Ljubljana

Durable products	Against plastic bags in Ljubljana	Used bus seats
Recycling used audio guide headphones	CHAIRity Project - Give it another chance	Project APPLAUSE
Making Japanese knotweed into paper	Toilet paper from waste packaging	Reuse Center and Repair Cafe at Povsetova 4
Upcycled furniture and equipment in the administrative building of RCERO Ljubljana	Reuse of (waste) material	Point For you: and raising awareness among visitors about reuse and sharing
Furniture reuse	WORDS library	Activities to promote short sales routes/green supply chains
Against plastic bags in Ljubljana markets	Campaign Gloves up! - a project to prevent the spread of the tiger mosquito	Bike sharing - BickeLJ

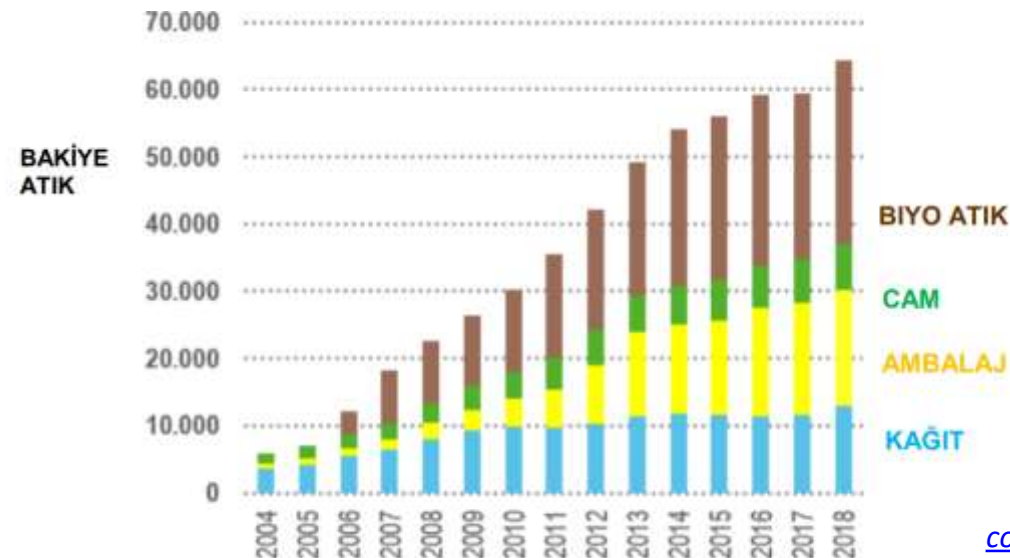
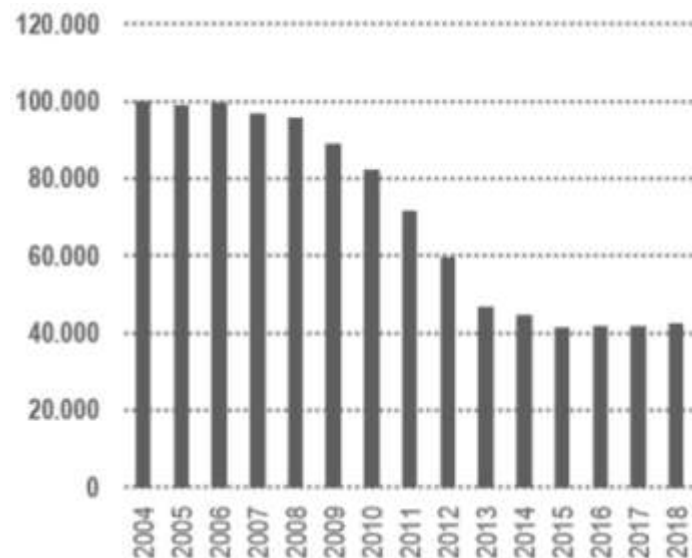
Source: Ljubljana Municipality, 20234 <https://www.ljubljana.si/sl/moja-ljubljana/varstvo-okolja/krozno-gospodarstvo-v-mol/primeri-kroznega-gospodarstva-v-mestni-obcini-ljubljana/>

# LJUBLJANA, Slovenia: Good Practice Example



## CURRENT SITUATION

- Waste management activities are carried out by Snaga, a state-owned enterprise with 600 employees.
- It serves a total of **395,328** citizens, covering **Ljubljana and 10 suburban municipalities**.
- In 2018, the amount of municipal waste generated per capita (358 kg) was **31%** less than the EU average (486 kg).
- In 2018, the separate collection rate was **68%** and the amount of residual waste per person was **115 kg**.
- A significant portion of the remaining waste is utilised as WDF for energy recovery. This means that **95 %** of the total waste is not sent to landfill.



Source: ZWE, 2019. [https://zerowasteurope.eu/wp-content/uploads/2019/10/zero\\_waste\\_europe\\_cs5\\_ljubljana\\_en.pdf](https://zerowasteurope.eu/wp-content/uploads/2019/10/zero_waste_europe_cs5_ljubljana_en.pdf)

# LJUBLJANA, Slovenia: Good Practice Example



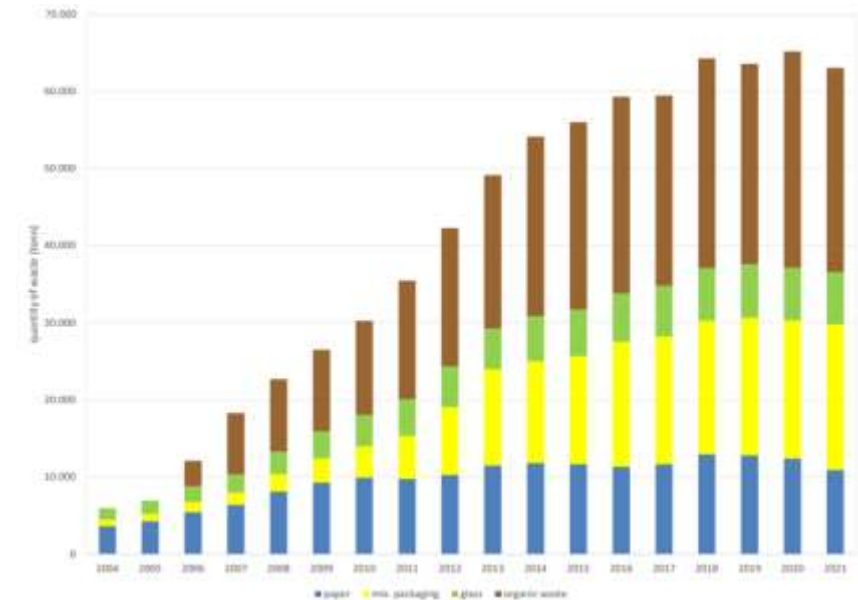
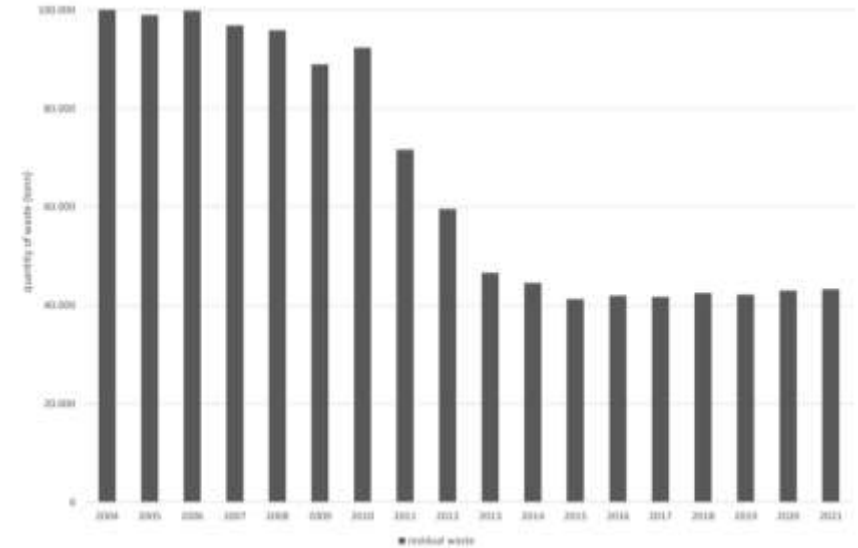
## TARGETS

- To increase the separate collection rate to **78 %** by 2025 and to **80 %** by 2035.
- To reduce annual waste generation to **280 kg/capita**.
- To reduce the annual amount of residual waste to **60 kg/capita** by 2025 and **50 kg/capita** by 2035.

**OBJECTIVE 1: EXTENDING DOOR-TO-DOOR COLLECTION TO THE WHOLE CITY**

**OBJECTIVE 2: REDUCING THE FREQUENCY OF WASTE COLLECTION**

**OBJECTIVE 3: COMMUNICATION FOCUSED ON WASTE PREVENTION AND REUSE**



Source: ZWE, 2019. [https://zerowasteurope.eu/wp-content/uploads/2019/10/zero\\_waste\\_europe\\_cs5\\_ljubljana\\_en.pdf](https://zerowasteurope.eu/wp-content/uploads/2019/10/zero_waste_europe_cs5_ljubljana_en.pdf)

# LJUBLJANA, Slovenia: Good Practice Example



## IMPLEMENTATION

### Objective 1: Extending door-to-door collection to the whole city

2002 - Residual waste door-to-door / Packaging waste kerbside

2006 - Residual waste and biodegradable waste door-to-door / Packaging waste kerbside

2011 - Residual waste, Biodegradable waste and Packaging waste door-to-door (Pilot: Brezovica)

2012 - Residual waste, Biodegradable waste and Packaging waste door-to-door (Dissemination: Ljubljana)



# LJUBLJANA, Slovenia: Good Practice Example



## IMPLEMENTATION

### Objective 2: Reducing the frequency of waste collection

2013 - Reducing the collection frequency (**reducing** the collection frequency of residual waste while **keeping** the collection frequency of **biodegradable and packaging waste** the same)

- In areas with low population density (predominantly detached houses), collection rounds were initially implemented once every two weeks, but this was soon changed to **once every three weeks**.
- In densely populated areas (mostly multi-apartment buildings), **residual waste** was collected weekly, while **biodegradable and packaging waste** was collected **several times a week**.

Waste management costs for households decreased, reaching **€8.20** per month in 2018. **Costs** in Ljubljana are among **the lowest in Europe and Slovenia**. The average annual cost across the country is €150, while in Ljubljana it is **less than €100**.



# LJUBLJANA, Slovenia: Good Practice Example



## IMPLEMENTATION

### Objective 2: Reducing the frequency of waste collection

Despite intensive communication campaigns of Snaga, users in areas with initially low separate collection rates **opposed the reduction of frequency for residual waste.**

However, despite pressure from residents and the media, Snaga **insisted on reducing the frequency of collection** and further strengthened communication about the reasons for the change.

#### MEDIA FIELD TRIP

*"The containers with residual waste were full of recyclable waste. As part of their strategy, Snaga organised **a field trip** for the media to see for themselves the condition of the residual waste containers. After removing the recyclable waste, the amount of waste that actually belonged to this container was much less than expected. **As a result, local and national media changed their minds and joined Snaga in asking citizens to separate their waste better.**"*



Source: ZWE, 2019. [https://zerowasteurope.eu/wp-content/uploads/2019/10/zero\\_waste\\_europe\\_cs5\\_ljubljana\\_en.pdf](https://zerowasteurope.eu/wp-content/uploads/2019/10/zero_waste_europe_cs5_ljubljana_en.pdf)

# LJUBLJANA, Slovenia: Good Practice Example



## IMPLEMENTATION

### Objective 3: Communication focussed on waste prevention and reuse

In 2013, with a change in its communication strategy, Snaga started to raise awareness on waste reduction and prevention rather than separate collection of waste.

#### GET USED TO USING IT AGAIN!

It has developed into a national video campaign in partnership with the Chamber of Commerce. In mid-2014, 75 products per day changed their owners in the Reuse Centres, while in 2018 this number increased to 150.

#### RAISE YOUR VOICE AGAINST FOOD WASTAGE!

Partnership with the media, local NGOs and food service providers. Activities in schools, reuse centers and city squares.

#### CLOTHING LIBRARY (KABINÉ ŠERINJON)

Kabiné Šerinjon is a mobile platform that offers its users the possibility to rent Slovenian designers' clothes at the Reuse Centre for up to two weeks at no cost.



*'Just because we are on the streets does not mean we are hungry!'*

*'We're full of discarded food!'*

*'Raise your voice against food wastage!'*

Source: ZWE, 2019. [https://zerowasteurope.eu/wp-content/uploads/2019/10/zero\\_waste\\_europe\\_cs5\\_ljubljana\\_en.pdf](https://zerowasteurope.eu/wp-content/uploads/2019/10/zero_waste_europe_cs5_ljubljana_en.pdf)



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# Thanks for your attention.



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