

ZERO WASTE EUROPE LIVE!

4 DECEMBER 2018

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**GENERAL MANAGER
SNAGA**

**COLLECTION OF BIO-WASTE
IN DENSELY POPULATED AREAS**



UK

GERMANY

POLAND

EU

FRANCE

AUSTRIA

HUNGARY

ITALY

SLOVENIA

SPAIN

The public company Snaga

AREA SERVED

CITY OF LJUBLJANA AND TEN
MUNICIPALITIES IN THE VICINITY

YEAR OF ESTABLISHMENT

1920

TURNOVER
35 MIO

OWNERSHIP

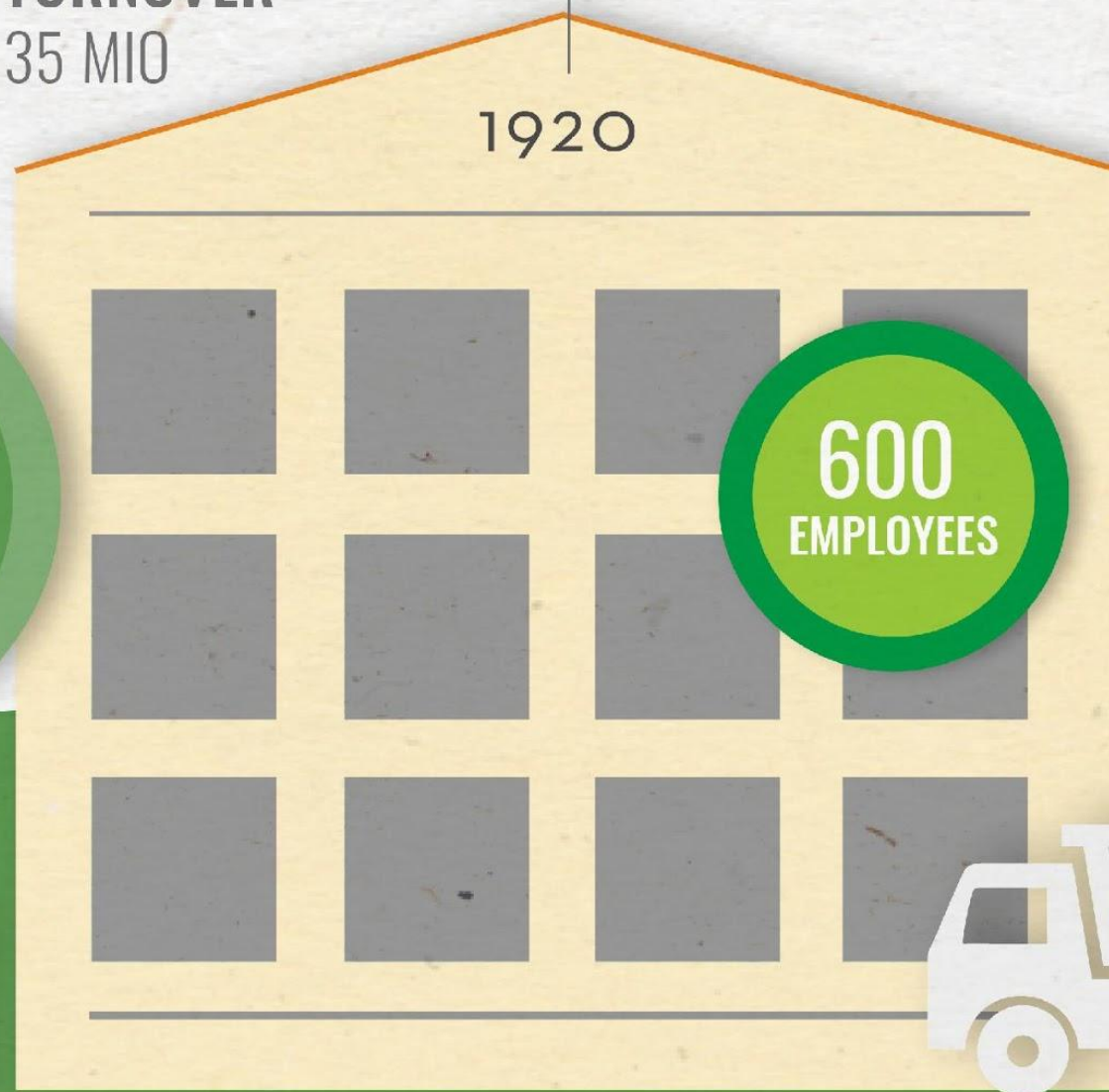
CITY OF LJUBLJANA AND SIX
NEARBY MUNICIPALITIES

**NUMBER
OF BINS**
151.028

600
EMPLOYEES

395.328
RESIDENTS

155.692
HOUSEHOLDS



Waste collection system in Ljubljana



4 PILLARS OF EFFECTIVE WASTE MANAGEMENT

LEGISLATION

GOOD SERVICE /
INFRASTRUCTURE

CONTROL
MECHANISM

COMMUNICATION

A map of Europe with Spain highlighted in a light blue color. The rest of the landmasses are in a darker blue, and the oceans are white. The word "SPAIN" is written in black capital letters over the highlighted area.

The structure of waste management legislation is in line with EU law.

The implementation of the Waste Framework Directive for MSW occurs through the various legislative articles:

- Environmental Protection Act;
- Decree on waste;
- Decree on biodegradable kitchen waste and garden waste management;
- Decree on the treatment of biodegradable waste and the use of compost or digestate ...

In total around 50 acts have been issued at the national level covering the various aspects of waste management.

Biodegradable kitchen waste and garden waste management

Decree on biodegradable kitchen waste and garden waste

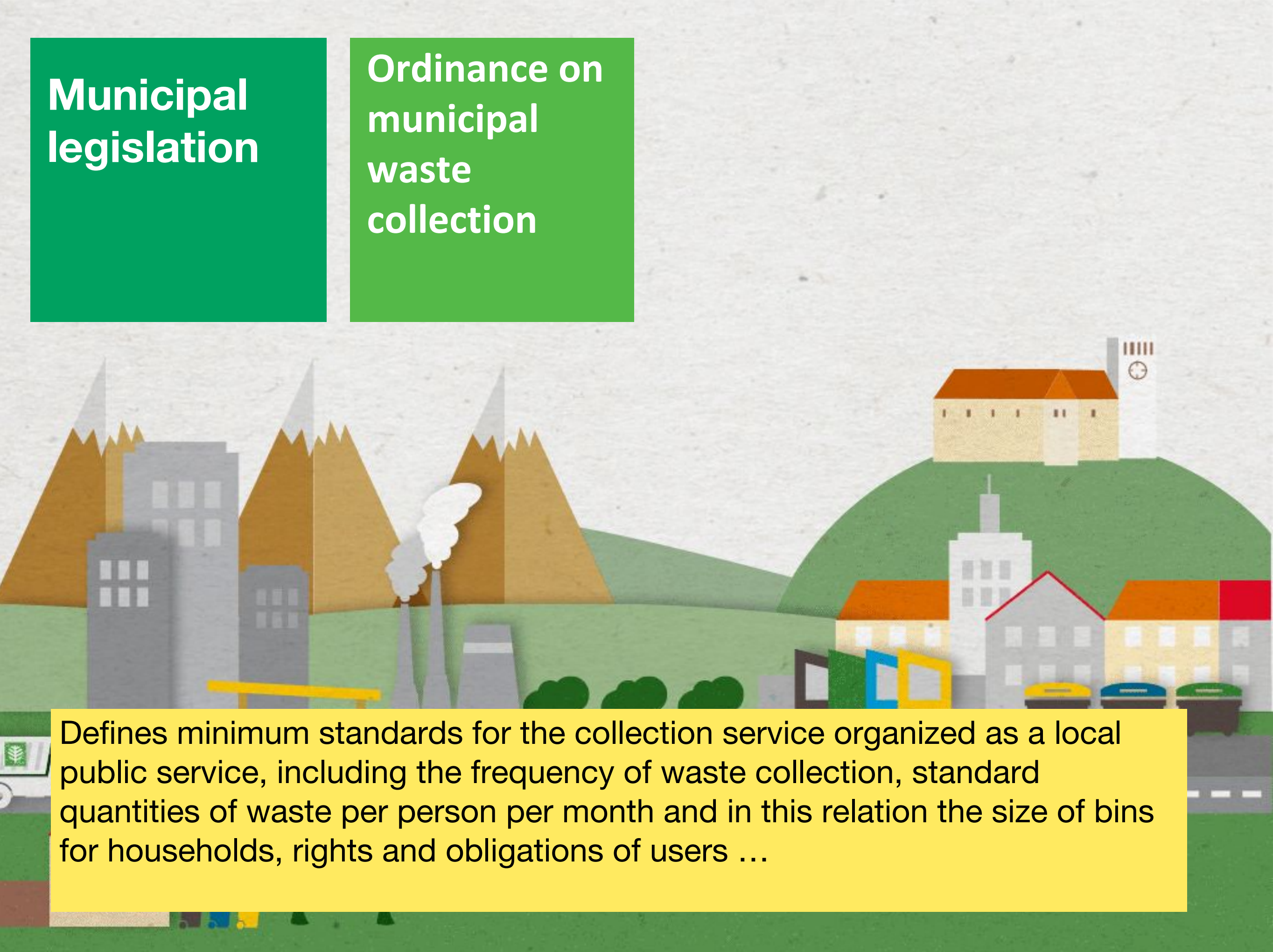
- Imposes obligatory treatments of green garden waste and biodegradable kitchen waste produced by catering businesses and households.
- Specifies obligations of public waste management companies in the field of kitchen waste and green garden waste management.

Decree on the treatment of biodegradable waste and the use of compost or digestate.

- Imposes uniform and obligatory procedures applicable in Slovenia for production, sales and labeling of compost and digestate produced from waste.

Municipal legislation

Ordinance on municipal waste collection

A stylized illustration of a town. On the left, there are brown mountains and a grey factory with smoke rising from it. In the center, there are green hills. On the right, there is a hill with a yellow castle on top. In the foreground, there are colorful houses and a yellow trash bin.

Defines minimum standards for the collection service organized as a local public service, including the frequency of waste collection, standard quantities of waste per person per month and in this relation the size of bins for households, rights and obligations of users ...

Ljubljana
began with
separate
collection in
2002.

Ecological
collection
sites



In 2006 Snaga introduced collecting **BIO waste** at the doorstep for all households (82% of them incl).



**Waste
collection**

Small BIO bins
for every
household free
of charge.



Snaga's bag

If users occasionally have more bio waste than it can be placed in a bin they can use special bag.



Since 2008 we have installed
66 underground collection units.

For depositing **BIO** and **residual waste** residents
of the city centre need to use a **special card.**



Successfully introducing door-to-door collection in 2013, Snaga **lowered** the frequency of collection for residual waste and introduced the collection of recyclables.

The frequency of BIO waste collection remained unchanged.



Waste collection

BIO waste collection **once a week** and in some areas once during cold months every two weeks.



Waste
collection

Waste
collection
centres

More than 20 types of waste can be disposed of without charge: **also green garden waste.**



We are
doing great!

In 2017 we
separately
collect 67%
of waste!





Ljubljana is an
EU capital with
the largest share
of recycled
waste



LONDON



LJUBLJANA



PARIS




BRUSSELS



BERLIN

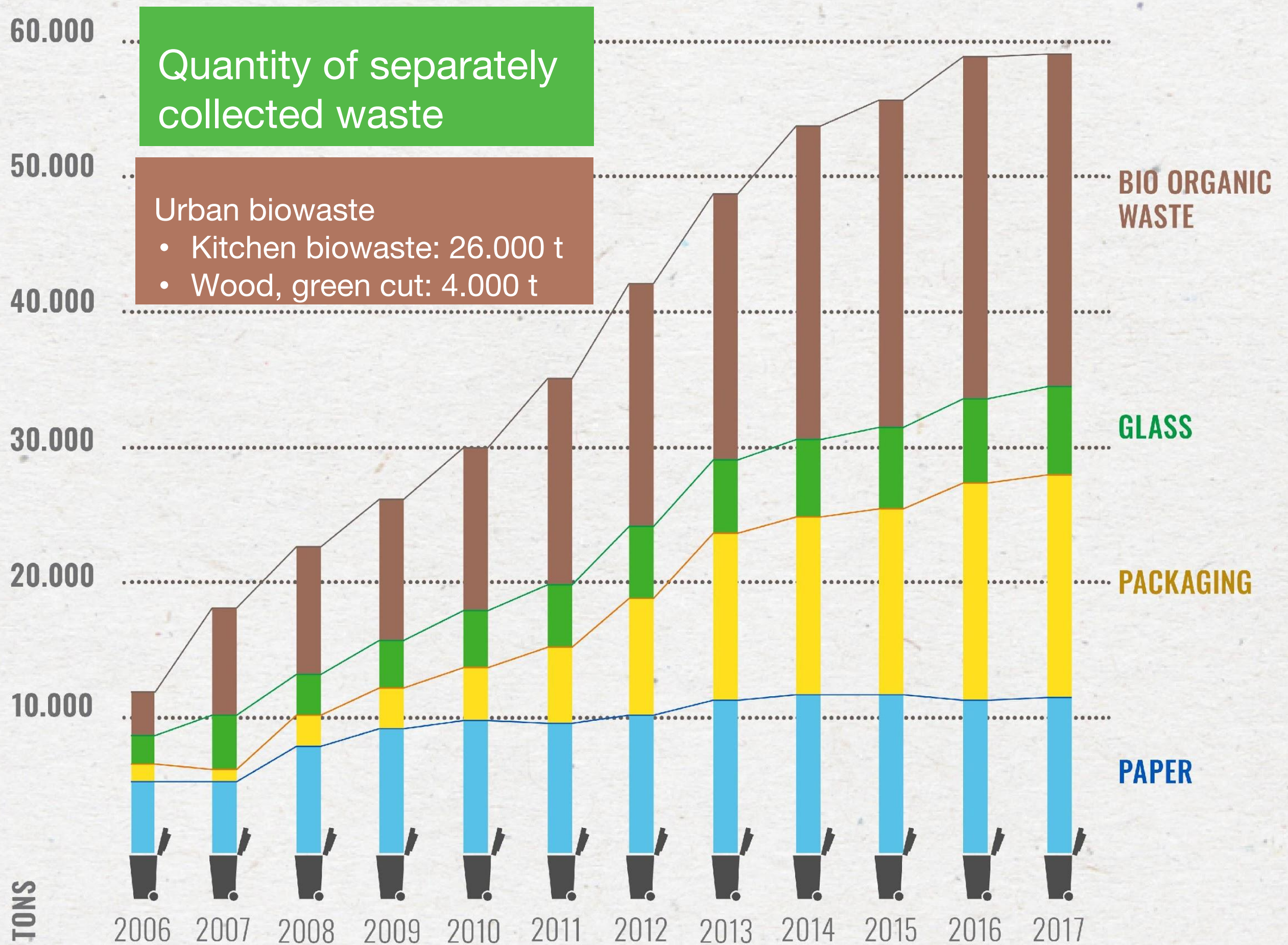


ROME



65 kilos of bio
waste per capita
per year.

Bio waste
represents
**20 % of all
collected waste.**



Regional waste management center (RCERO) Ljubljana is Slovenia's biggest cohesion fund environment project.

It processes waste from more than one third of Slovenia.



Mechanical-biological facilities for waste processing

1. Treatment of mixed household **residual waste** and waste from small businesses, service activities, etc.; 150,000 t/year.
2. Treatment of separately collected **biodegradable household waste**; 21,000 t/year.





Rastko

slovenski kompost

Odličen
za gnojenje vrtov,
zelenic, pripravo
mešanice
za sajenje in setev

7,000 tons of compost following the treatment of separately collected organic biodegradable waste.

By using the superior technology in RCERO Ljubljana, we achieved the highest possible quality of the produced compost, which can be used on agricultural lands.

Fee/charge system:
Pay-As-You-Throw (PAYT)

How do we calculate the cost users pay?



The cost is calculated depending on the size and the number of **bins for residual waste** and **bin for biological waste** (if user has one); we take the **monthly frequency of bin emptying**.

Underground collection units

For users of underground collection units, the actual number of disposals per month is billed, but no fewer than **six for residual waste** and **four for biological waste**.

Every active card is billed.



© BCE ECB EZB EKT EKP 2002

An average
invoice on a
household is
8 € per month.



In December 2014 and 2015 we proved that separate waste collection pays off.

Due to the increased share of separately collected waste and consequently smaller share of landfilled waste Snaga at end of 2014 to all of its users issued a credit note equivalent to the December invoice and at end of December 2015 reduced the payment of December's invoice for 60%.



Communication on BIO waste separation and collection

Constant and
active
collaboration
with the media



Websites and social media



Snagazin



A MAGAZINE FOR A BETTER LIFESTYLE
2018



INTERVIEW WITH SUNITA WILLIAMS.

**If we saw Earth from space,
we would take better care of it**

MAIN
STORY:

**Fools or
visionaries?**

**HYGGE: ENJOYING
EXPERIENCES RATHER
THAN THINGS**

Snaga's users receive a publication every year. From 2016 it is entitled "Snagazin – a magazine for a better lifestyle".

Yearly magazine also covers topics on how households need to collect their waste.



If waste is disposed of improperly, Snaga will place a notification sticker on your bin or post box. If irregularities continue, Snaga will notify the City of Ljubljana or intermunicipal inspectors who may issue fines.

User support and assistance centre



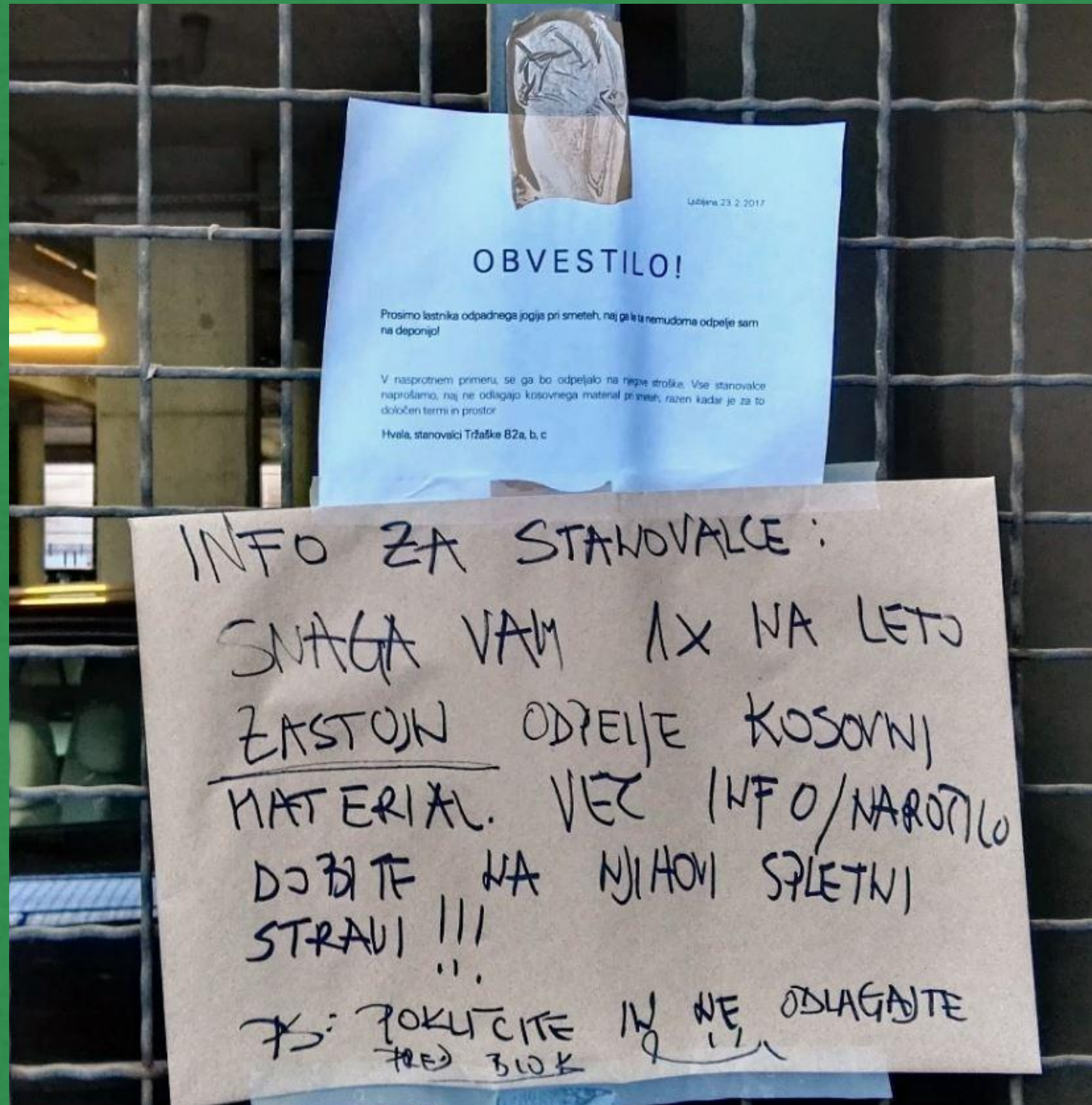
Educational
programs for
kindergartens,
primary and high
schools.

Actions „**Free
compost for users**“
as a reward for good
separation of bio
waste



snaga

Our users
are our best
advocates 😊





www.snaga.si

www.mojiodpadki.si

www.ponovnauporaba.si

www.rcero-ljubljana.eu



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