

#ZeroWasteCities



Workshop

How to design and implement Zero Waste plans?

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www.zerowasteurope.eu

ZERO WASTE PLANS

Ljubljana, 10th of May 2019





Zero Waste

A yellow circular icon containing a house with a heart inside, representing home.

Dom

Zero Waste

A red circular icon containing three stylized human figures, representing a community or municipality.

Občina

Zero Waste

A purple circular icon containing a calendar, representing events or dates.

Prireditve



Zero Waste

A blue circular icon containing a stylized building with multiple windows, representing a hotel.

Hotel

Zero Waste

A teal circular icon containing a document with a pencil, representing legislation or laws.

Zakonodaja



Kaj je

A green circular icon containing a question mark, representing a question or inquiry.

Zero Waste?



Schedule

- 9.30-10.30 Presentation of Zero Waste concepts, tools and planning examples
- 10.30-10.50 Brief break
- 10.50-12.30 Practical case workshop
- 12.30-13.00 Wrap up & closing



Definition of »Zero Waste«

The **conservation of all resources** by means of **responsible production, consumption**, reuse, and recovery of products, packaging, and materials **without burning, and with no discharges** to land, water, or air that threaten the environment or human health. (ZWIA, 2019)



O

What is and isn't Zero Waste

- ~~Zero waste to landfill~~

- **Journey**
- Cultural shift
- Bottoms-up, community fed



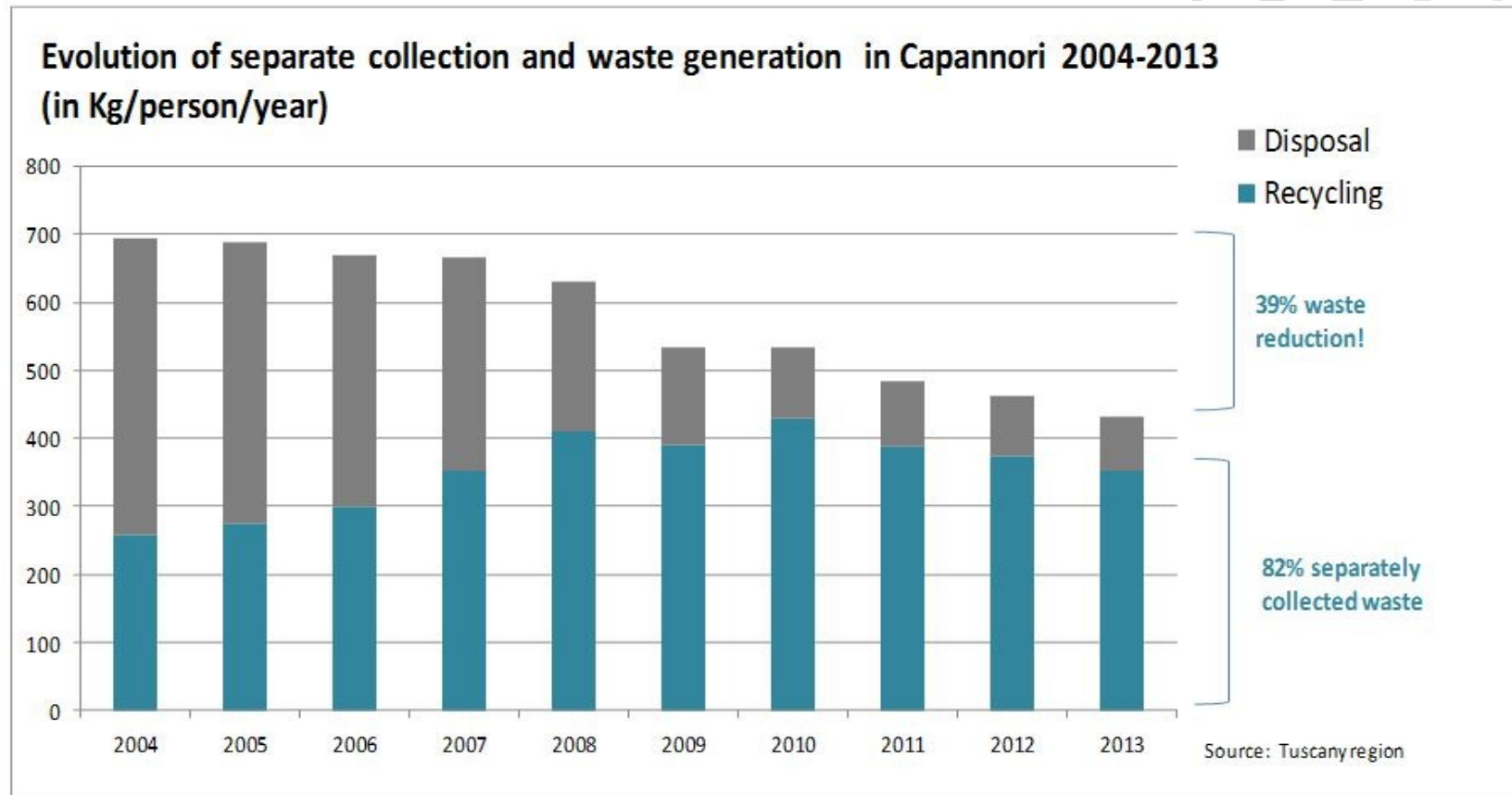
But why bother?



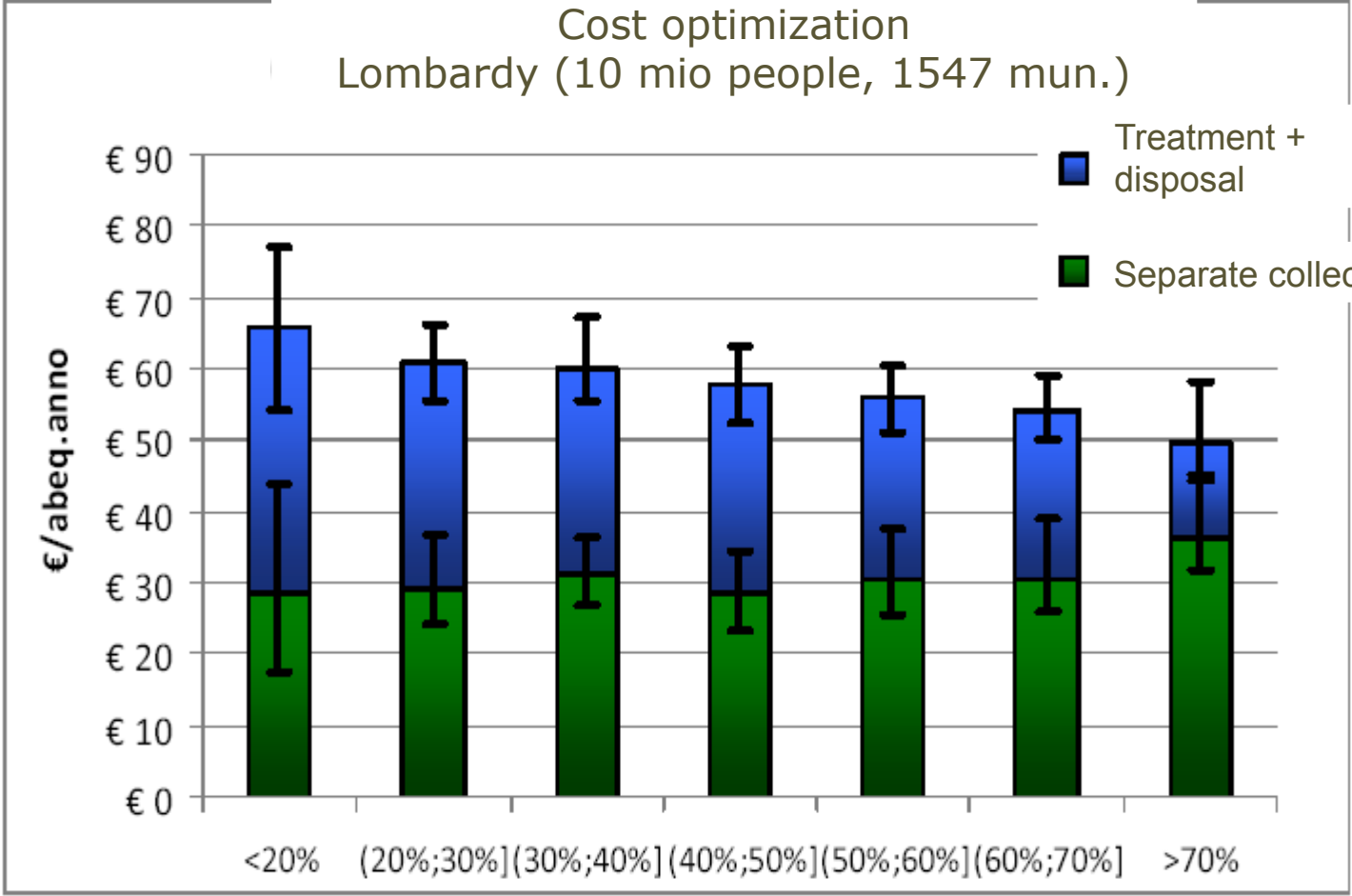
A high-altitude mountain landscape, likely a glacier retreat site, is shown. The foreground and middle ground are heavily littered with trash, including plastic bottles, bags, and other debris. In the background, a group of people is gathered on a rocky slope. The text "SOMETHING IS WRONG!" is overlaid in large, bold, red letters with a black outline across the center of the image.

SOMETHING IS WRONG!

Less waste, lower cost

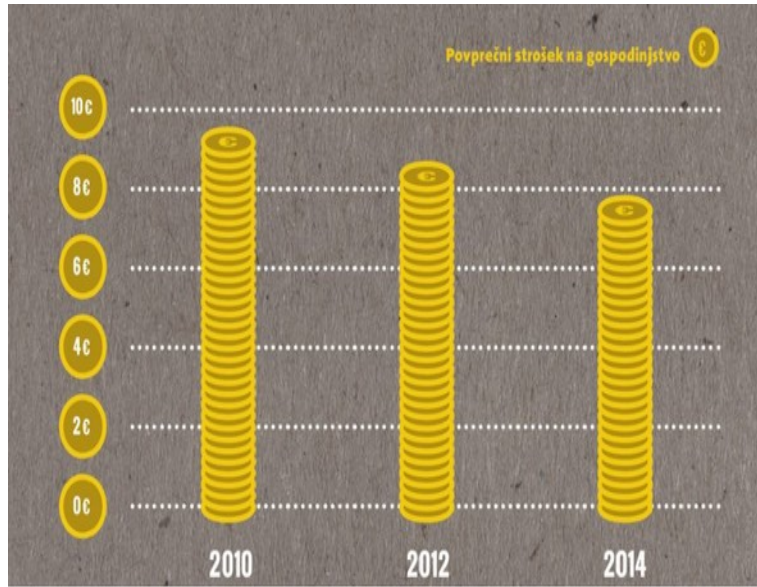


Separate collection = lower cost



Job creation and costs

Average monthly cost in Ljubljana



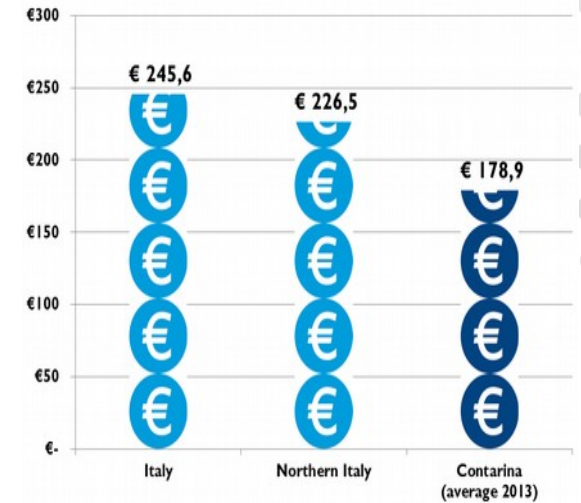
Average yearly WM cost for a household

Slovenia: 150 eur

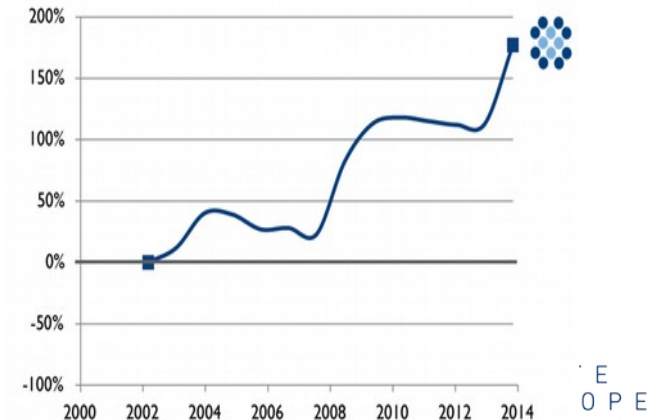
Ljubljana: <100 eur

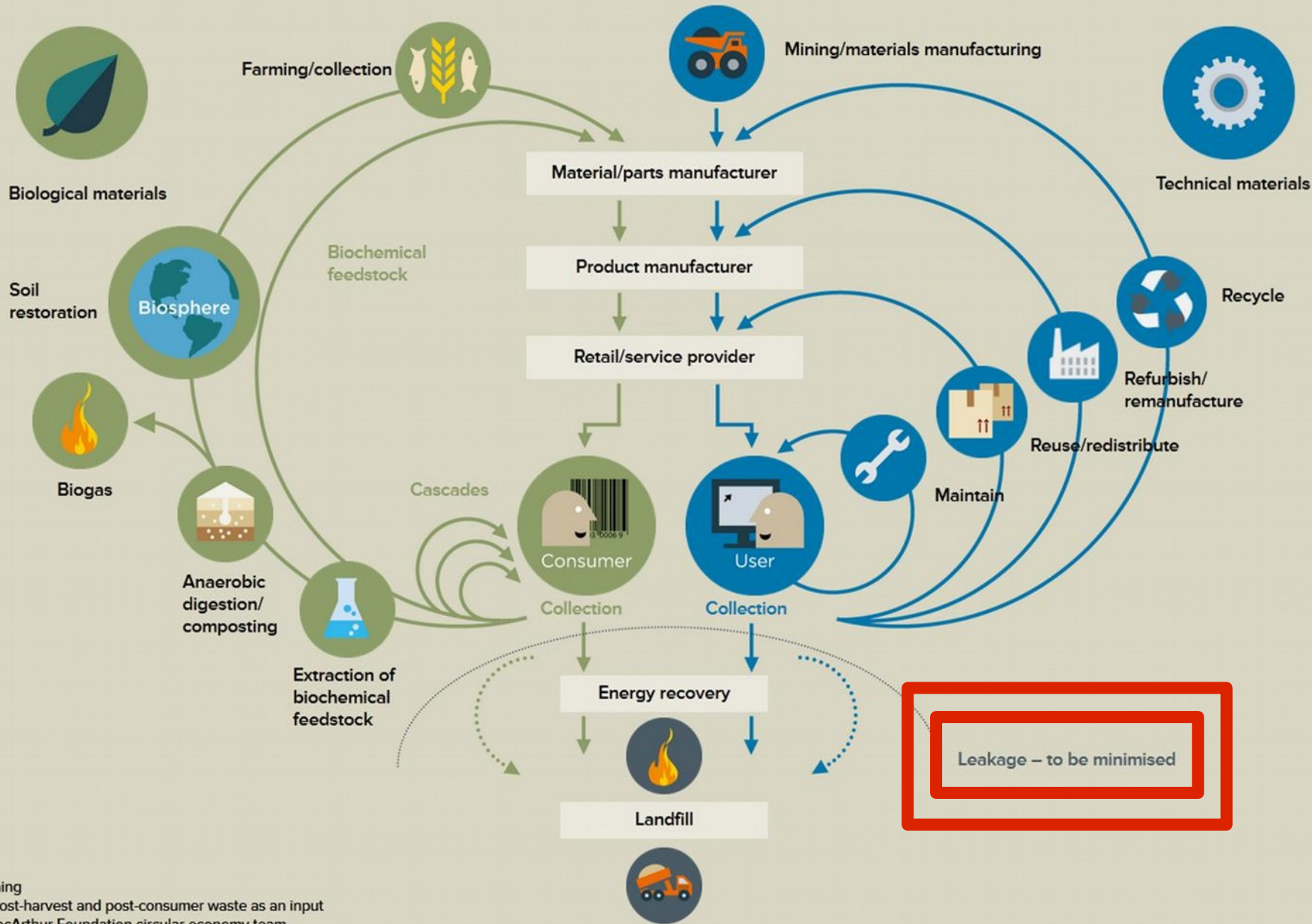


... in Italy



New jobs in Contarina





1 Hunting and fishing
 2 Can take both post-harvest and post-consumer waste as an input
 SOURCE: Ellen MacArthur Foundation circular economy team

A large pile of plastic waste, including bottles, containers, and other debris, is shown under a dramatic sunset sky with orange and blue clouds. The text is overlaid in the center of the image.

**Higher recycling targets,
antiplastic measures,
strictness and
driving disposal prices up**

New obligations

Member states have to set up **separate collection** of:

- **Biowaste** (by end of 2023)
- **Textiles** (by 2025)
- **Hazardous** waste (by 2025)
- Waste **oils** (by 2025)

Encourage **selective disassembly during demolition** of buildings.

Set up **separation of construction waste**.



Benefits for cities

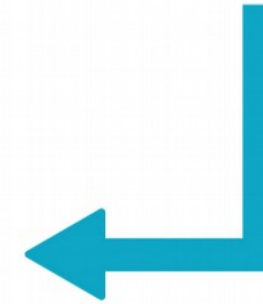


Less litter
Less waste to manage
Less residuals



Reduced expenses for the city
Reduced fees for citizens
Less environmental impact

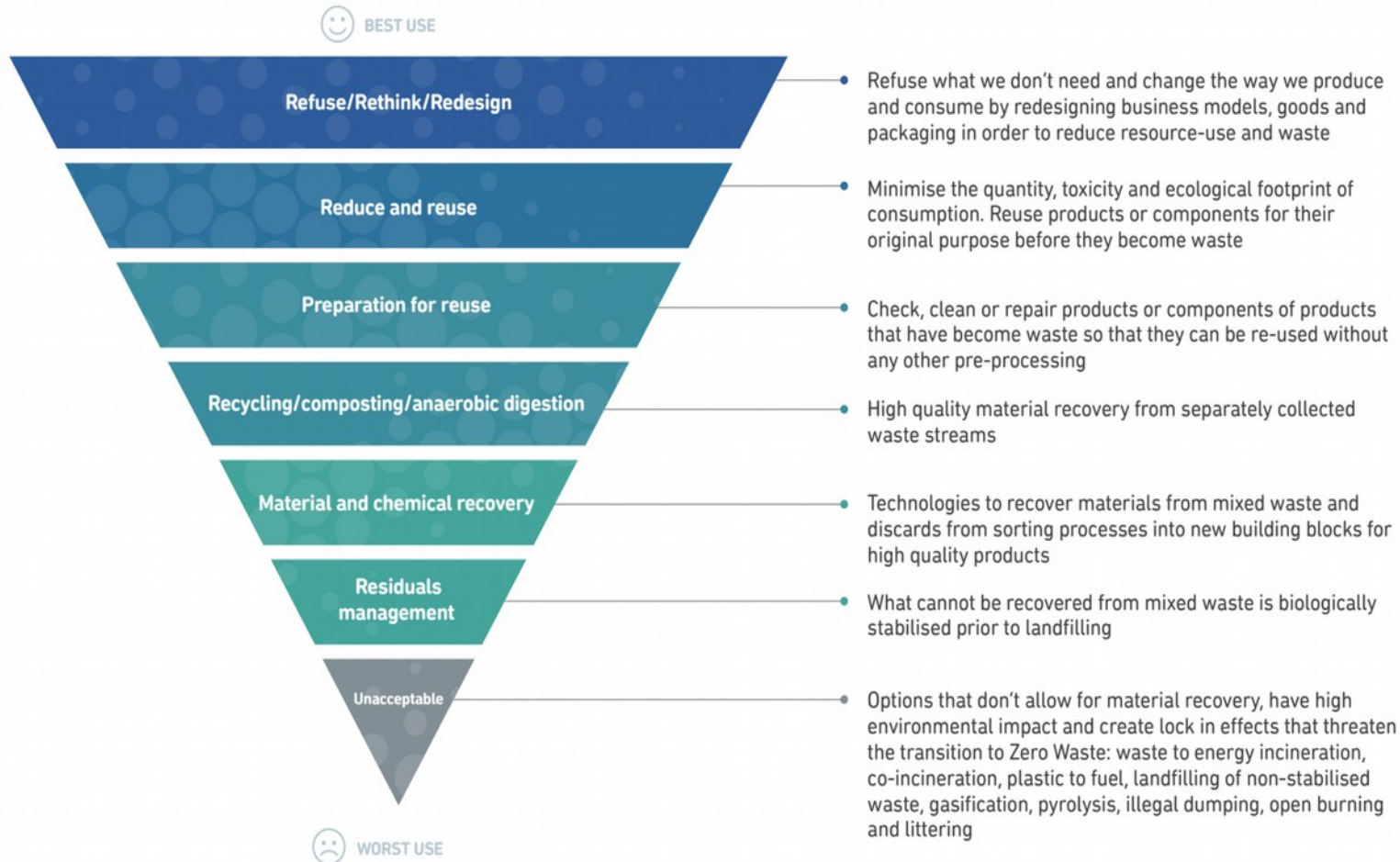
More social integration
More social innovation
Compliance with EU law
More local jobs
Money stays in the community



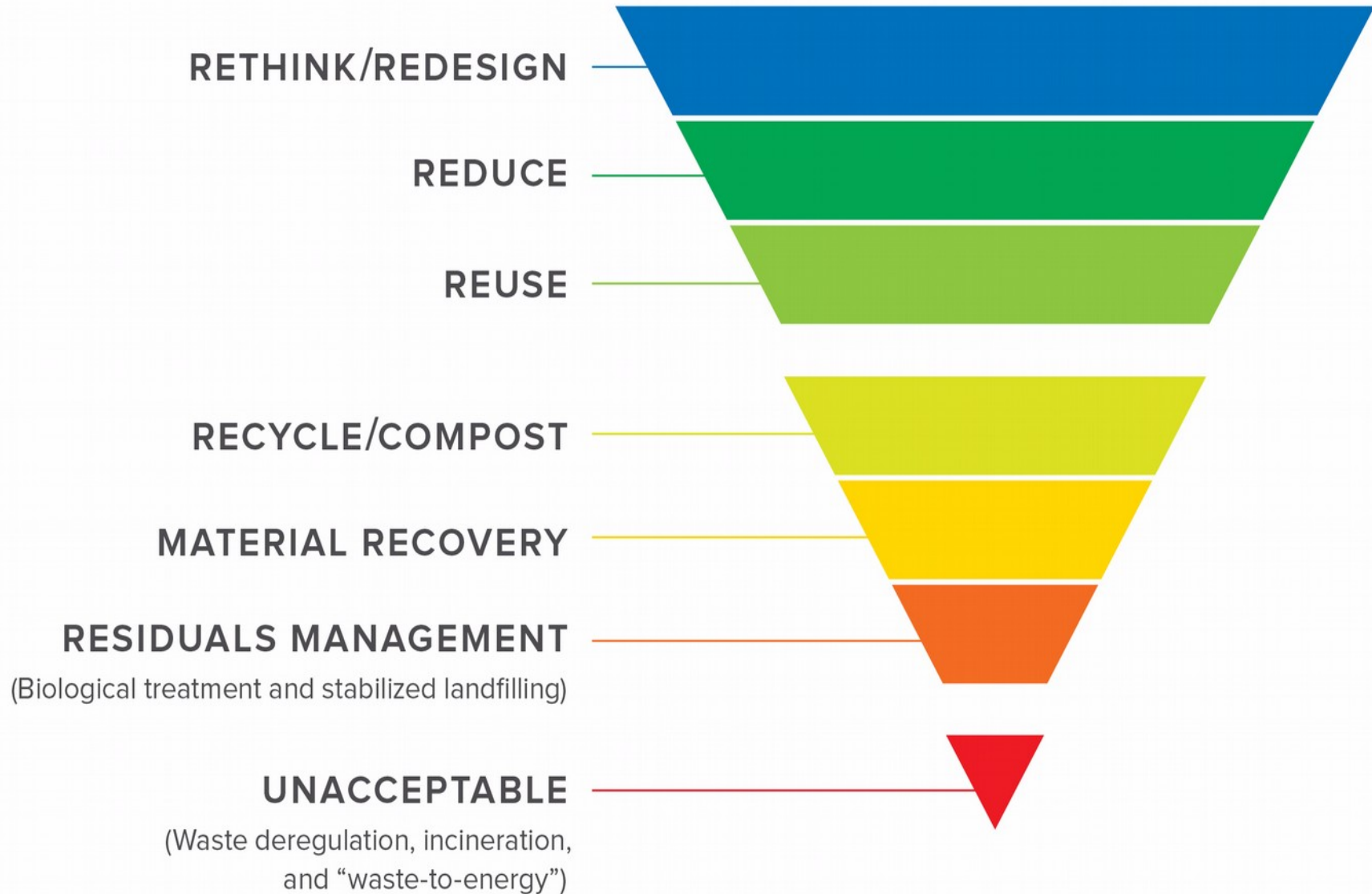
How to approach it?



Zero Waste Hierarchy



THE ZERO WASTE HIERARCHY



Key Zero Waste measures

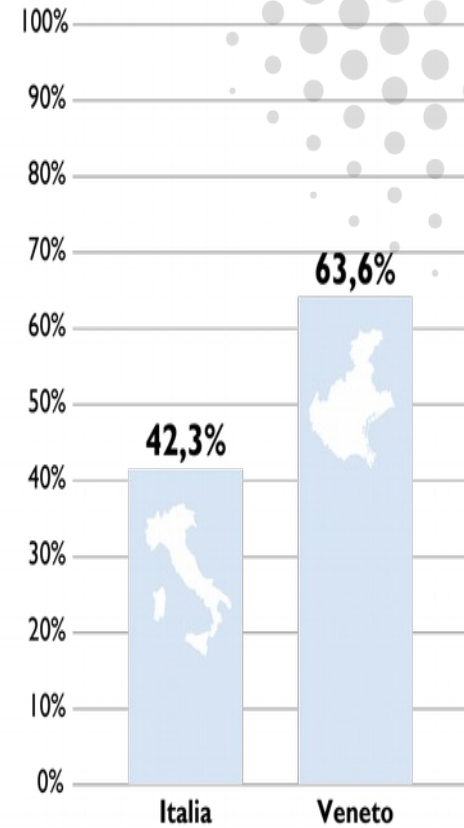
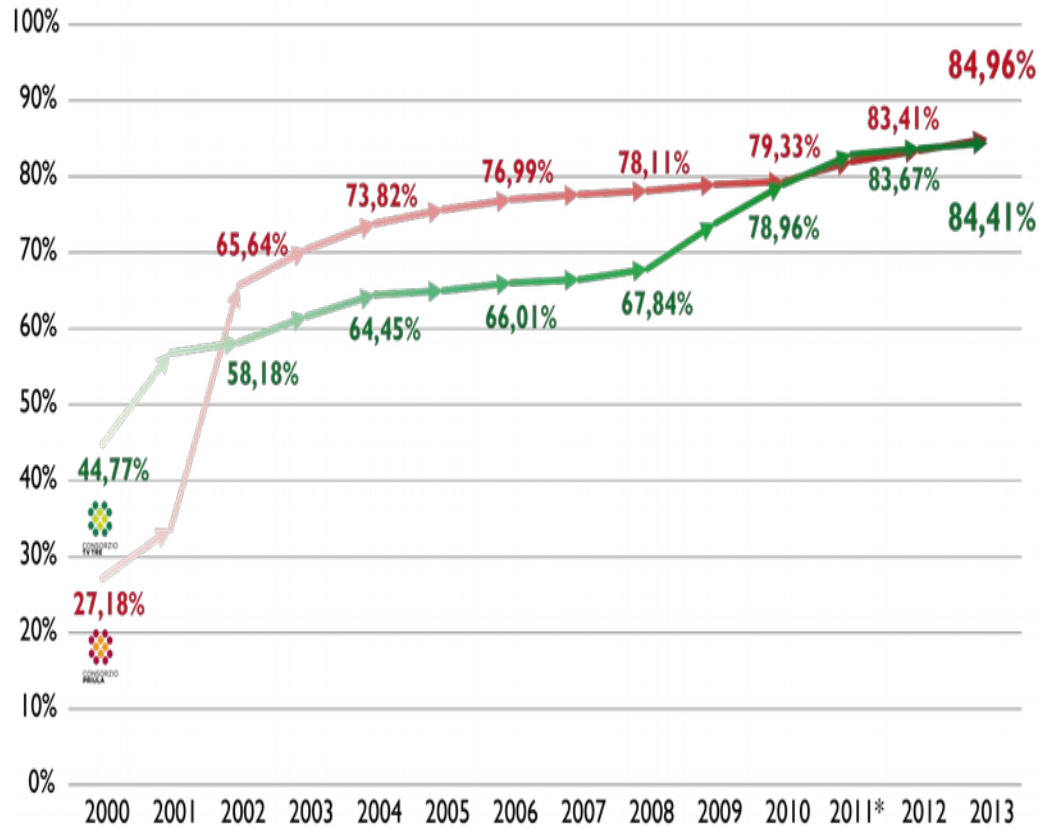
- Door to door collection – including biowaste!
- Pay as you throw (PAYT)
- Prevention measures – **municipalities' role!**
- Biowaste management
- Waste composition analysis
- **Communication**



Biowaste / organic waste

- **HIGH AMOUNTS:** important contributor to high levels of recycling (35 – 55 % of waste)
- **OPERATIVE LEVEL:** minimal amounts in residuals mean fewer pick ups
 - cost optimisation
 - synergistic effect for separate collection of other fractions
 - composting at home = complete prevention
 - local composting = quality compost
- **QUALITY:** less biowaste in other streams means they're cleaner, easier to work with, sort and recycle

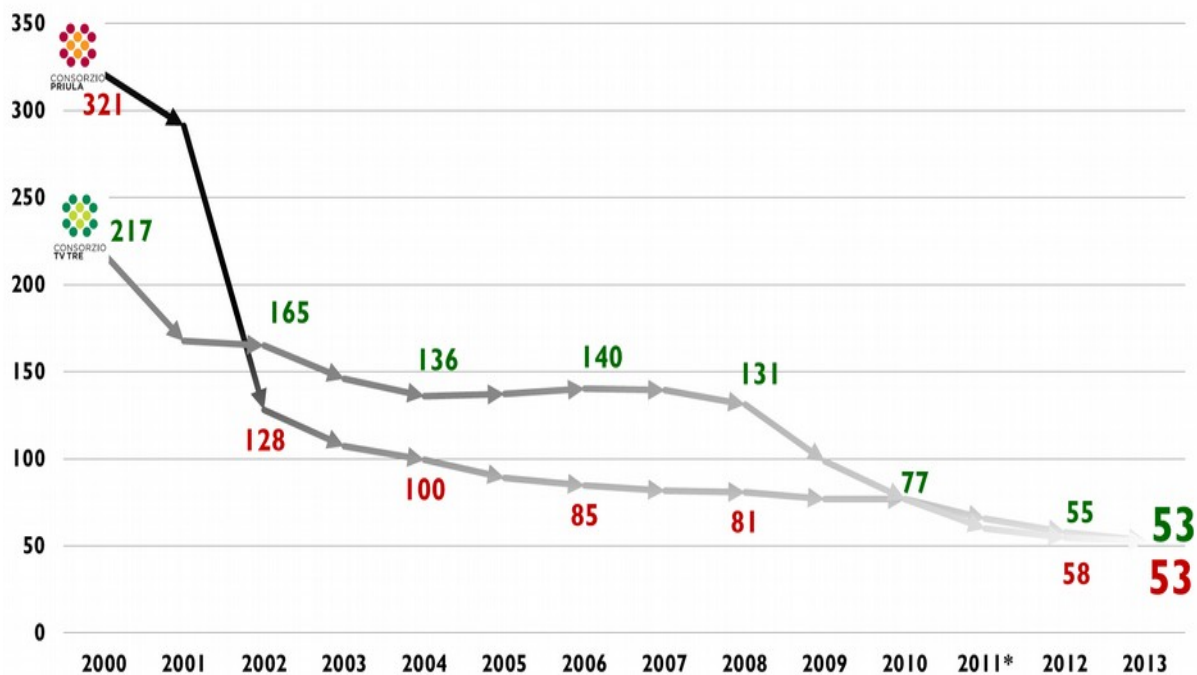
Door-to-door collection and pay-as-you-throw (PAYT)



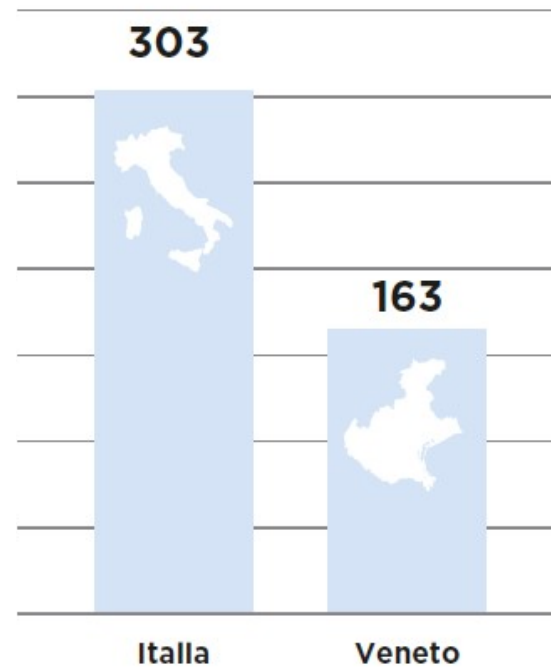
Contarina: 50 municipalities, 530,000 people



Fewer and fewer residuals



* dal 2011 i rifiuti da spazzamento delle strade vengono avviati a recupero e quindi conteggiati tra i rifiuti riciclabili



Contarina: 50 municipalities, 530,000 people



Residual composition analysis

1	papir ter karton in lepenka	27,58	11%
5	steklo	0,25	0%
6	kovine	1	0%
7	odpadki iz lesa	0	0%
8	oblačila, tekstilije	12,95	5%
9	OEEO ter baterije in akumulatorji	0	0%
10	drugi odpadki* - MKO	70	27%
11	plenice	47,4	19%
12	gradbeni	7,2	3%
13	keramika	4,3	2%
14	iztrebki	16,65	7%
15	guma	0	0%
16	nevarni odpadki	1	0%

Prevention

- Home and community composting
- Redesign: coffee
- Rethink: diapers, water fountains
- Enabling and encouraging reuse, repair and DIY refurbishment
- Leveraging local / regional legislation: green procurement, spurring competition, minimum standards for public events
- Food waste
- ...

Communication

Zero Waste Family challenge @ Capannori:

Residuals per person per year:

3.88 kg! (participants)

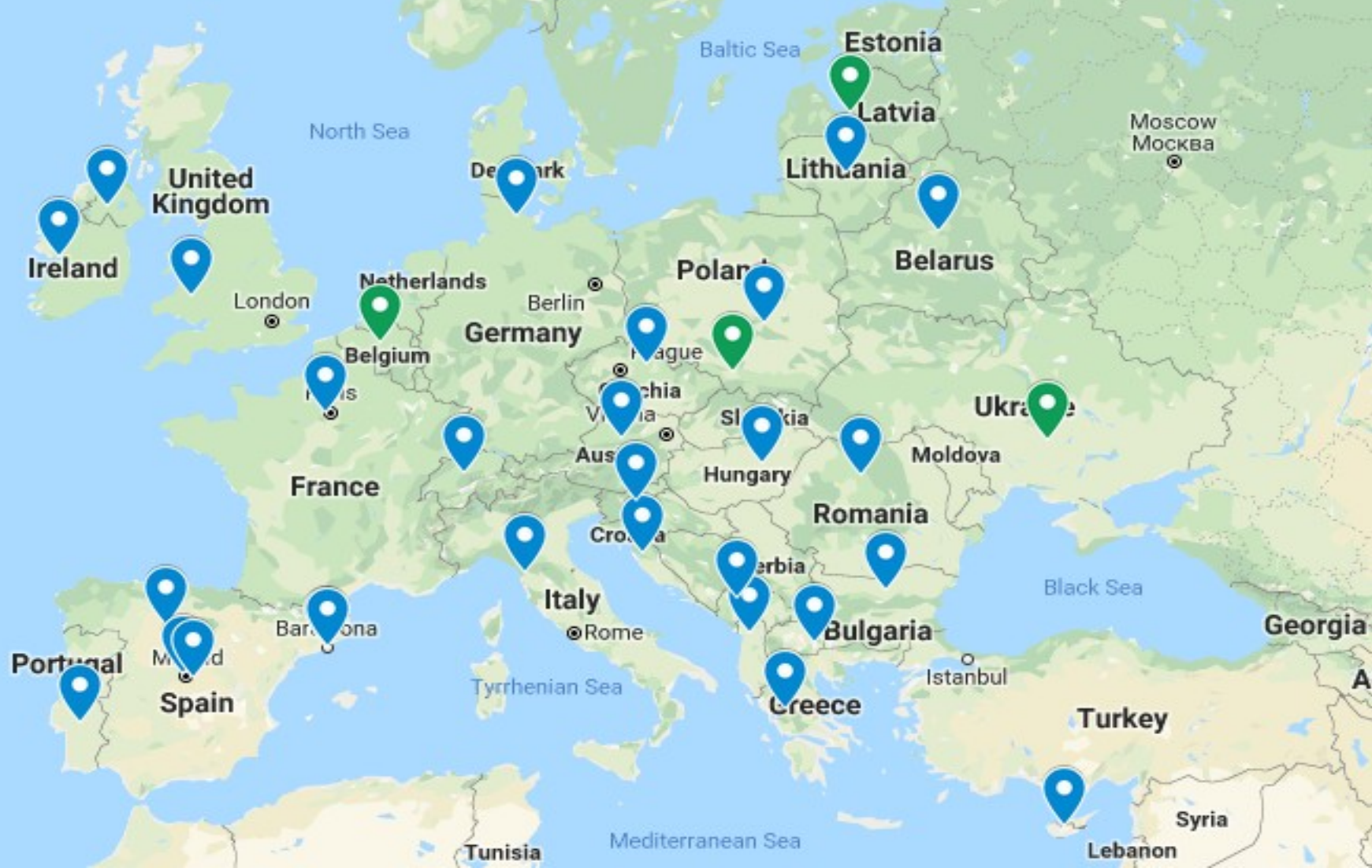
85.91 kg (Capannori average)

150 kg (Slovenian average)



Process examples



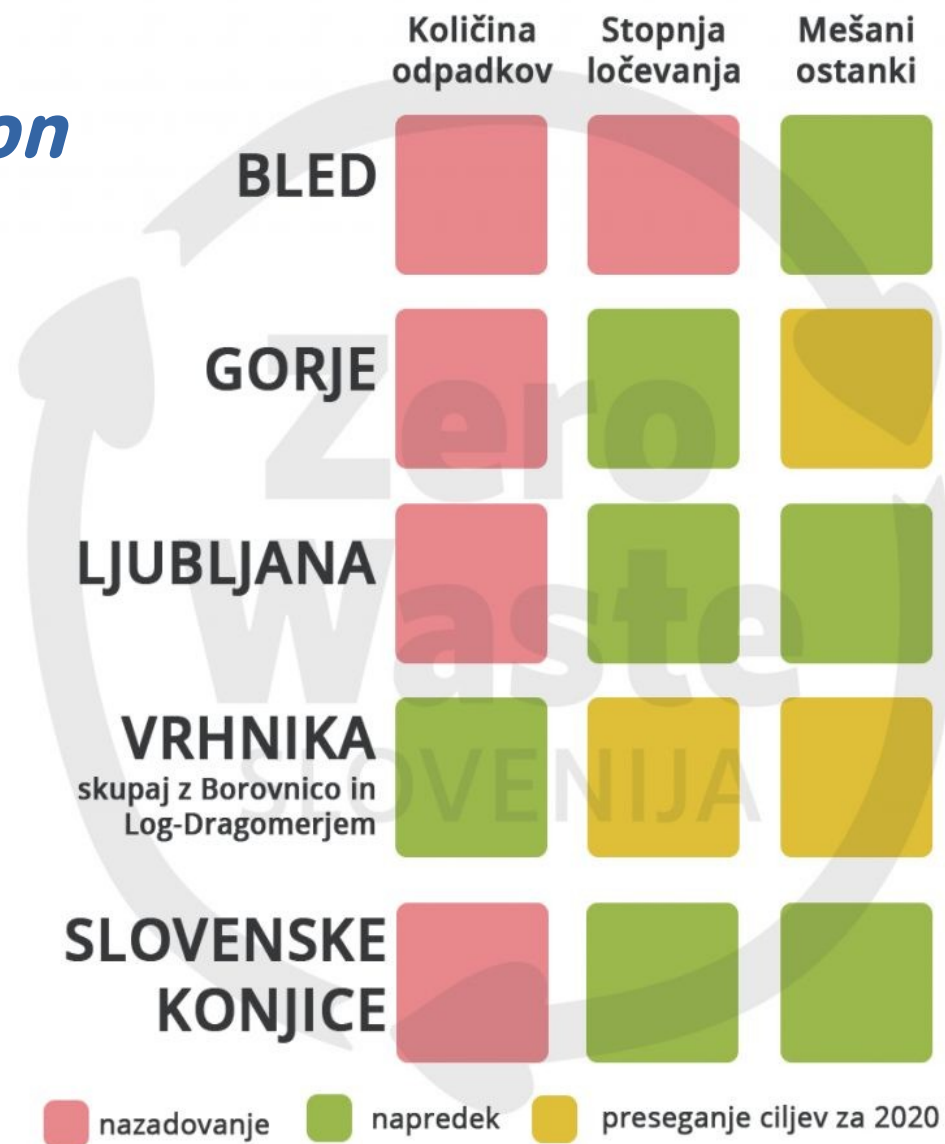


ZERO WASTE EUROPE

400 communities, 31 national organizations

Network of municipalities *on the path to Zero waste*

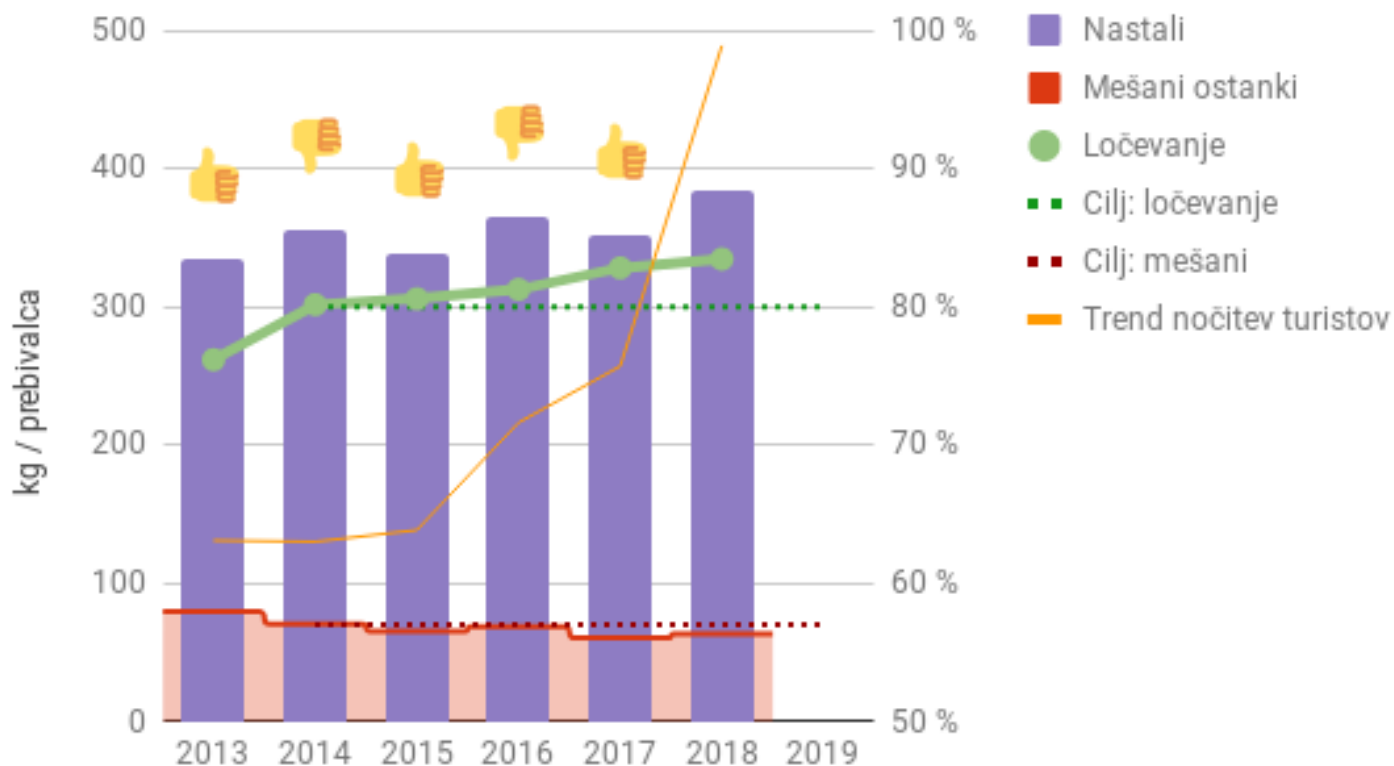
- transcending EU targets
- custom-tailored targets
(better results, engagement)
- currently 9 municipalities covering 17 % of the population
- various reasons for joining



Vrhnika, Borovnica, Log-Dragomer

Vrhnika, Borovnica, Log-Dragomer: Komunalni odpadki, ključni kazalniki

Od sprejema Zero Waste zaveze naprej (2014)



[Case study a
vailable here](#)

Process

- Formal application
- Assessment of the current situation = first data
 - recommend a composition analysis
- Zero Waste advisory board
- Zero Waste commitment and strategy
 - no burn, no bury
- Public presentation & adoption by local council
- **ZWS and ZWE oversee everything**



Resources

**Our platform to
help municipalities
go Zero Waste**

 zerowastecities.eu



Masterplan
Toolkit



Webinars



Workshops &
Trainings

ZWE ACADEMY



Case studies



Study tours



Expert insights



Thank you!

Jaka Kranjc,
Ekologi brez meja
<https://ebm.si/en>



Wider frame and drivers of success

- EU targets, no additional national obligations
- closures of substandard landfills
- very limited incineration
- no EU funds for waste infrastructure in the 2013-2020 financial perspective
- public awareness and pressure

Infrastructure can only get you so far!

Groups

Olha Melen-Zabramna

Pablo Chavanel

Tomas Kaminskas

Pierre Condamine

Charlotte Muckensturm

Inga Muliuolė

Klaus Willke

Alexis Sicilia

Olena Kravchenko

Sarunas Reikalas

Teresa Scolamacchia

Aleš Pungerčar

Solomiia Romaniv

Lina Šleinotaitė-Budrienė

Michaela Schorpp

Municipal solid waste

- Organic
- Packaging: plastic, metal, composite
- Paper
- Residual / mixed
- Textiles
- WEEE
- Waste oils