



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

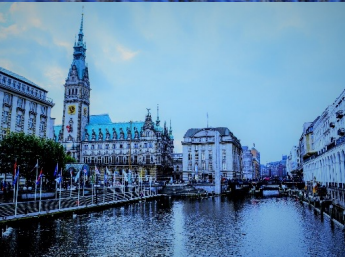


THIRD VIRTUAL MEETING
20th April 2021

Plastic Waste Management in
European Cities – Key Role of
Associations and NGOs



HISTORIC CITIES AGAINST PLASTIC WASTE (HISCAP)



Agenda



- | | |
|-------------------------|--|
| 10:00 - 10:05 | Opening of the Event Dr. Jelena Barbir, Hamburg University of Applied Sciences, Germany |
| 10:05 - 10:20 | Keynote speech: Plastic waste management in European cities: challenges and possibilities Prof. dr. Žaneta Stasiškienė , Kaunas Technological university, Lithuania |
| 10:20 - 10:35 | PLASTIC FREE JULY: How this initiative is reflected in cities? Rebecca Prince-Ruiz, Australia |
| 10:35 - 10:50 | H2020 projects: Historic Cities against Plastic Waste (HISCAP) Dr. Jelena Barbir, Hamburg University of Applied Sciences, Germany |
| 10:50 - 11:05 | Plastic waste: the role and perspective of local authorities (ACR+) Jean-Benoit Bel, ACR+ Association of Cities and Region for sustainable Resource management, France |
| 11:05 - 11:20 | Zero Waste Cities Jack McQuibban, Zero Waste Europe, EU |
| PANEL DISCUSSION | |
| 11:20 - 11:50 | Panel Discussion Session |
| 11:55 - 12:00 | Final remarks & closure Dr. Jelena Barbir Hamburg University of Applied Sciences, DE |

ZANETA STASISKIENE



Prof. Zaneta Stasiskiene - Director of the Institute of Environmental Engineering Kaunas University of Technology (KUT). Her experience under UNEP DTIE was transferred to Zimbabwe, Vietnam, Tanzania, Russia and covers areas of Sustainability assessment, sustainable innovation and development of environmental project financing schemes, infrastructure activity plans for Spain, Central and Eastern Europe, South-East Africa, Asia Countries. Research Work: The leader of the Research Group on Sustainable Cities at KUT. She is a Leader of scientific group "Smart and sustainable cities" at Kaunas University of Technology (since 2015), Chairman of Environmental Engineering PhD Committee at Kaunas University of Technology (since 2020); Expert Lithuanian Research Council (since 2014); Project manager INTERREG EUROPE, Horizon2020.



Plastic waste management in European cities: challenges and possibilities

Plastic waste management in European cities: challenges and possibilities

Prof. Dr. Žaneta Stasiškienė
Kaunas University of Technology, Institute of
Environmental Engineering (APINI), LITHUANIA



“According to the UN, the world’s urban population is expected to grow by 2.5 billion by 2050, with over 90 per cent of this growth to take place in Africa, Asia, Latin America and the Caribbean.”

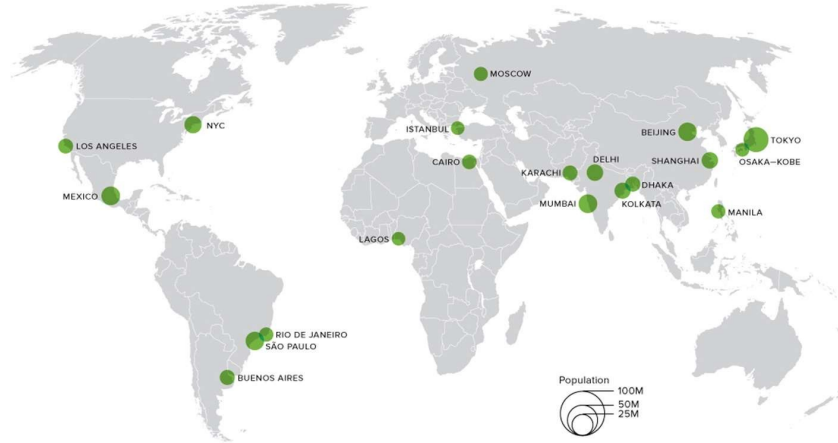
Two thirds of the whole worlds of people by the year of 2050 will live in urban areas and this process of rapid urbanization is shaping our cities.

Chart of the Week

THE WORLD'S 20 MOST POPULOUS MEGACITIES (2010 - 2100)

A total of 13 African cities will surpass New York in size over the next 80 years

2010 TOP 20 CITIES BY POPULATION



SOURCE: Global Cities Institute

visualcapitalist.com



ktu

1922

Mega-cities are emerging in places we never heard of before. Bigger cities come with major economic growth.

“By 2025, urbanization will welcome and additional 1.8 billion consumers to the world economy, 95% of them in emerging markets”

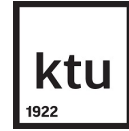
Municipal waste generation

ktu

1922



Cities as pollution generators



Urban centers are responsible for

an estimated 60% of plastic marine debris,

as inefficient waste collection and management systems and polluted waterways carry plastic pollution to the ocean, and threaten land and marine ecosystems.

This growing plastic threat is indiscriminate, with cities across all regions facing similar challenges. From the villages and rural tourist destinations in Southeast Asia, to the coastal cities of the Mediterranean, to the capital cities of Northern Europe, all regions and townships from all continents are feeling the impact of plastic in nature.

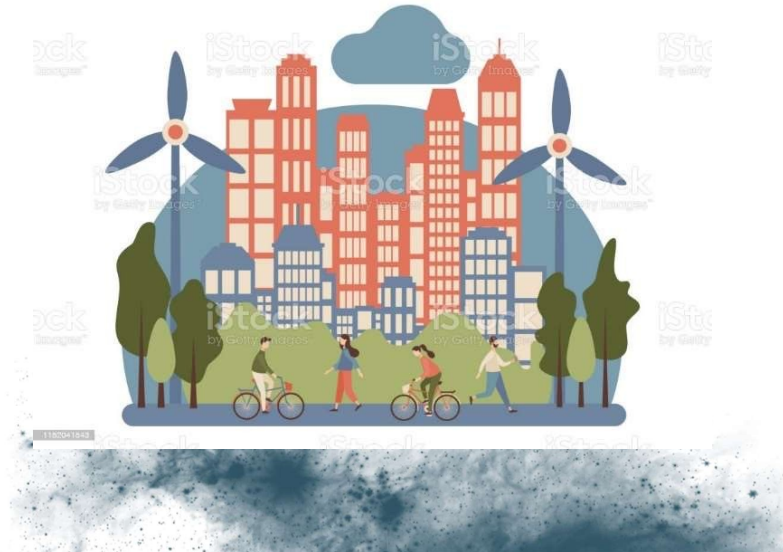
Cities have a key role to play, and can lead the fight against plastic with strong policies and innovative solutions that engage stakeholders at all levels.



The Zero Waste Cities

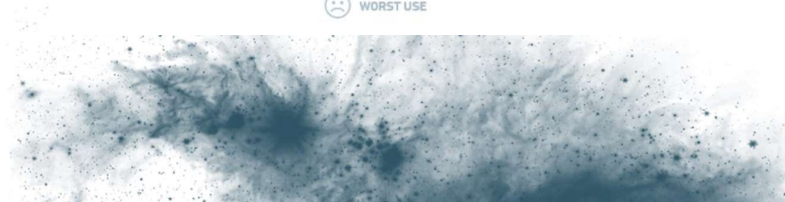
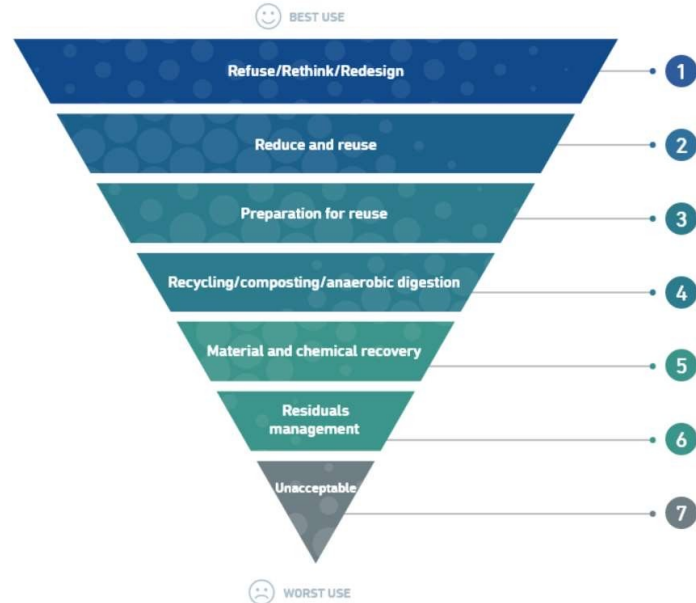
The Zero Waste Cities is a continuous effort to phase out waste – not by burning or landfilling it – but instead by creating and implementing systems that do not generate waste in the first place

**“Cities are powerful actors
with the collective capacity to
bend the plastic curve”**



Priorities for zero waste city

Zero waste is 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.



Strategies

ktu

1922

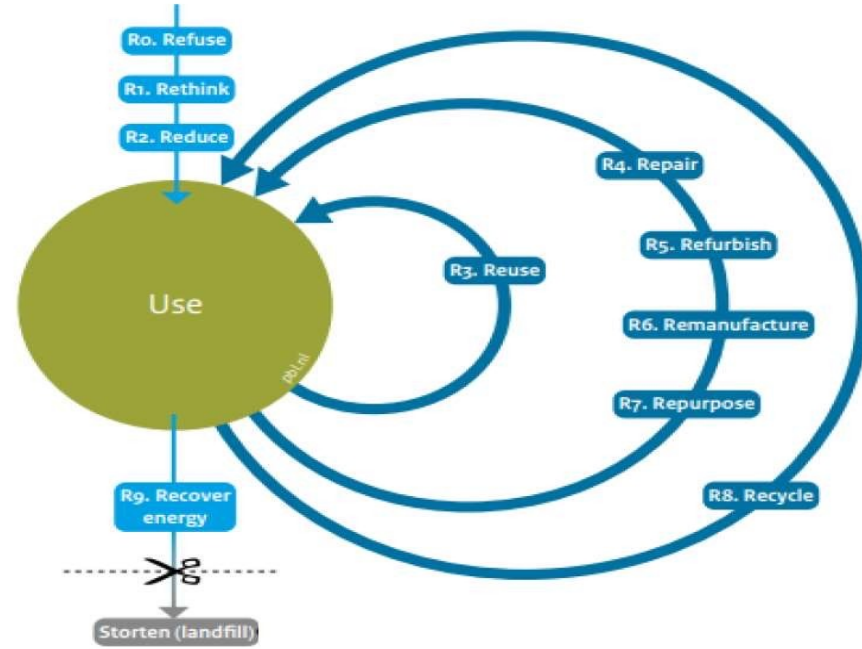
RETHINK PLASTIC



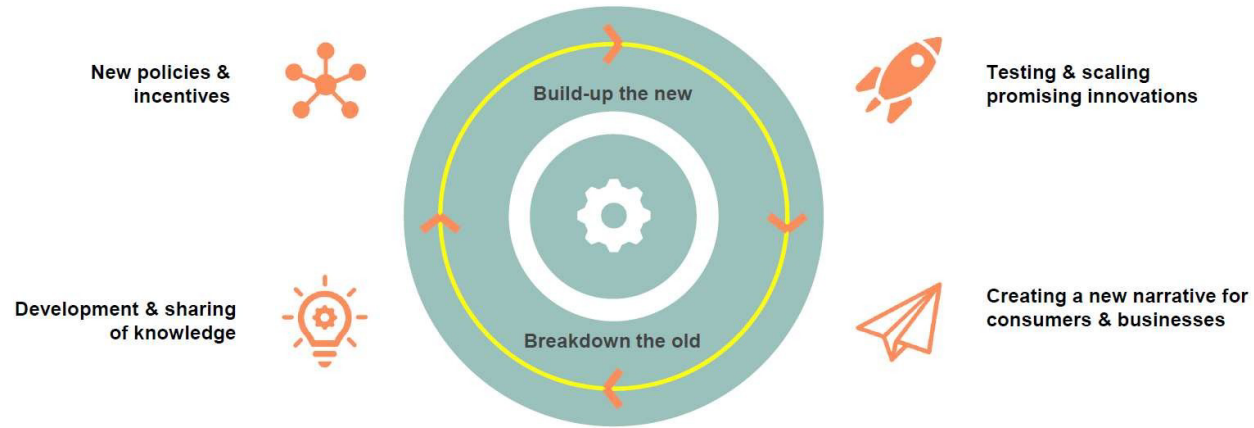
@bryantmatters

Creating Effective Systems for Reuse

We can't recycle our way out of the plastic crisis



How to transition to a world full of reusables?



National policies and incentives



Flanders (Belgium)

Ban on disposable cups at events and in municipalities by 2020

Ban on disposable food containers at municipalities by 2022



France

Law under debate to obligate larger supermarkets to dedicate 20% of their surface space to food refill stations by 2030



Germany

Obligation to offer reusable packaging for food and drinks to-go by 2023



Local policies and incentives



Leiden (Netherlands)
Ban on disposable cups on city events, obligation for deposit system for reusable cups



Tübingen (Germany)
Local tax on single use food and drink packaging by 2022



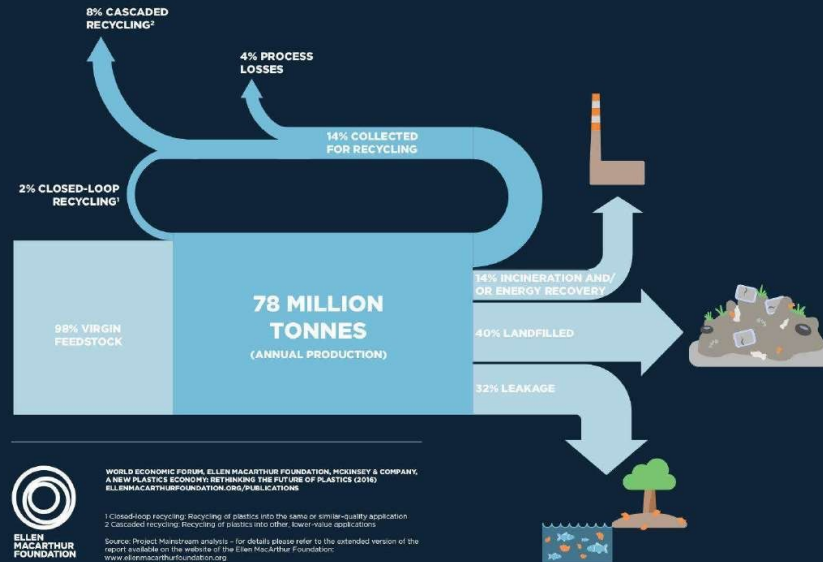
Leuven (Belgium)
Subsidies for reusable nappies

Is recycling enough?



Clearly
not...

TODAY, PLASTIC PACKAGING MATERIAL FLOWS ARE LARGELY LINEAR



Reusable vs single-use packaging

ktu

1922

| Type of Packaging | Packaging Description | Product Examples |
|------------------------------|---|--|
| Refillable by Bulk Dispenser | Container, bottle, cup. Customers use their own reusable packaging or the branded refillable packaging provided in-store or at a mobile truck thereby avoiding the need to produce new packaging. | Cereals, grains, candy, wine, juice, mineral water, beer, olive oil, vinegar, detergent, soap, hair care products, perfume, body and face lotion |
| Parent Packaging Refill | Bottle, container, pouch, pod, tablet, powder. The refill packaging is made with less material than the parent packaging. Parent packaging can be refilled by: <ul style="list-style-type: none">• Pouring product inside parent packaging;• Placing container inside of parent packaging;• Diluting concentrated product in water inside parent packaging. | Makeup, dental floss, tooth and mouthwash tabs, deodorant, perfume, cosmetics, cleaning products, hair care products, flavoured water |



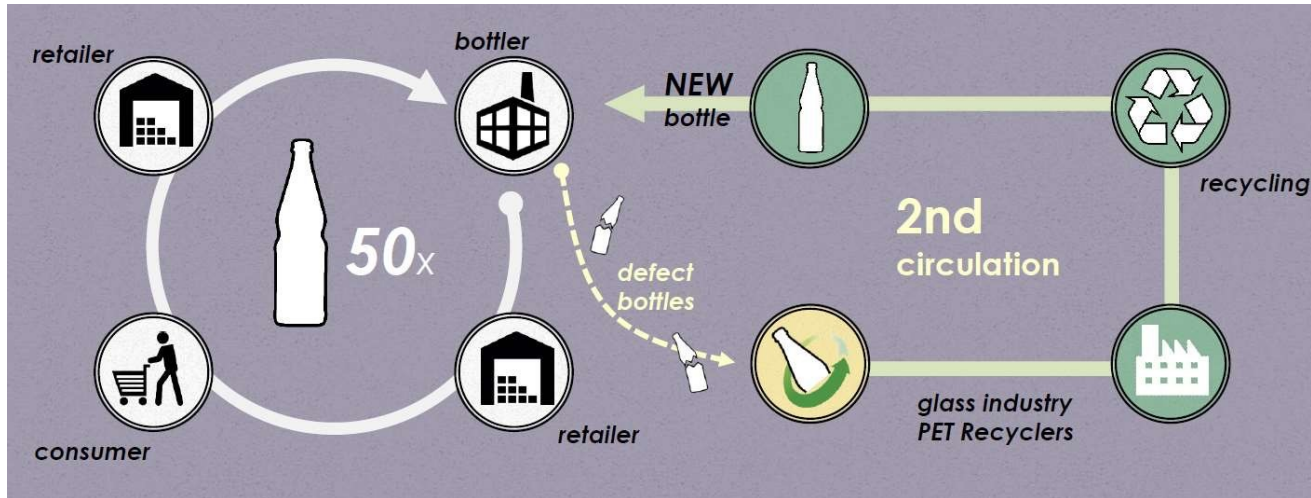
Reusable vs single-use packaging



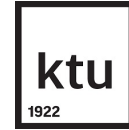
| | | |
|-----------------------------|---|---|
| Returnable Packaging | Container, bottle, cup, plate, bowl Customers return empty packaging that will be cleaned and refilled for future use by the retailer/producer (can be combined with a deposit system to provide a financial incentive). | Beer, soft drinks, mineral water, perishables, detergent, soap, cosmetics, hair care products Reusable cups, containers, plates (for events, cafes, restaurants) |
|-----------------------------|---|---|



The Double circuit of refillables



Determining how many DRS programs will be introduced in Europe



Currently, there are 9 European Countries with active DRS programs.

- Croatia
- Denmark
- Estonia
- Finland
- Germany
- Lithuania
- The Netherlands
- Norway
- Sweden

4 Countries have currently signed into law initiating DRS programs by 2022.

- Romania
- Portugal
- Latvia
- Malta

6 more countries have either signed laws or announced intention to begin a DRS program in 2023

- The Slovak Republic
- Austria
- Turkey
- The United Kingdom
- Greece
- Republic of Ireland

France has not announced adoption of DRS, but has signalled intention to do so by 2025



Strategies

ktu

1922

RETHINK PLASTIC

DISPOSABILITY
IS A
DESIGN FLAW



FULLY
RECYCLABLE

@bryanmalters



TOXIC
FREE

REDESIGN
PLASTIC
PRODUCTS

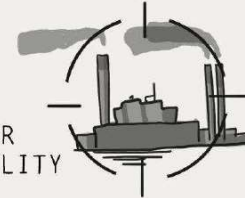


PRODUCER
ACCOUNTABILITY

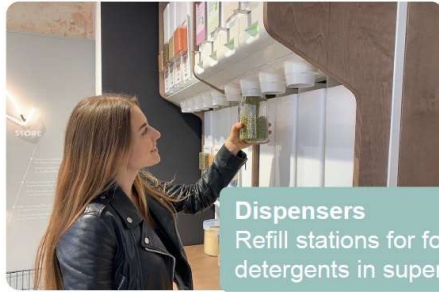
INCORPORATE
RECYCLED
PLASTICS



BETTER
TRACEABILITY



Testing and scaling promising innovations



Dispensers
Refill stations for food and detergents in supermarkets



Reusable containers
For online grocery shopping



Bags and boxes
Reusable packaging for e-commerce



Cups and food containers
Low and high tech solutions for take away and delivery

Strategies

ktu

1922

RETHINK PLASTIC

OUR
RELATIONSHIP
WITH
PLASTIC



CUT DOWN ON
VIRGIN
PLASTIC

OUR
PLASTIC
FOOTPRINT



REDUCE PLASTIC
PRODUCTION & CONSUMPTION

@bryanmalters

Measures and strategies for Plastic waste minimization in a city



FINANCIAL INSTRUMENTS

Incentives for plastic prevention, reuse and recycling



PREVENTION

Avoid and minimize the use of plastic



COLLECTION

Collect, sort and manage plastic as a resource



REUSE

Reuse to extend product and material life-cycles



RECYCLING

Recycle plastic to support a circular economy

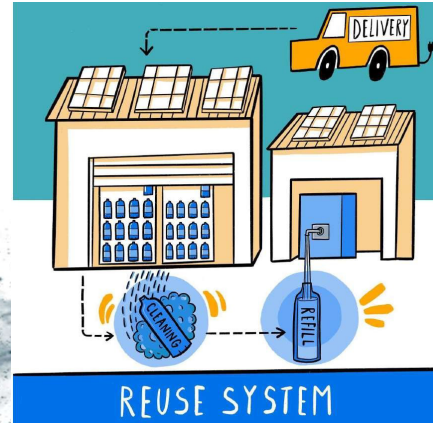


DISPOSAL

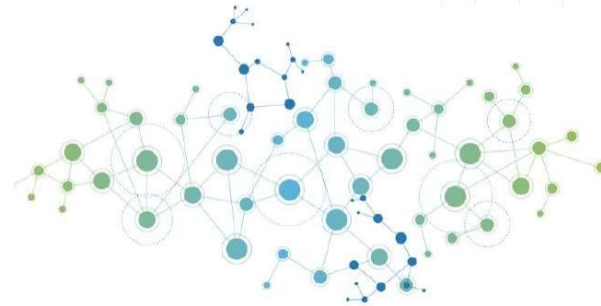
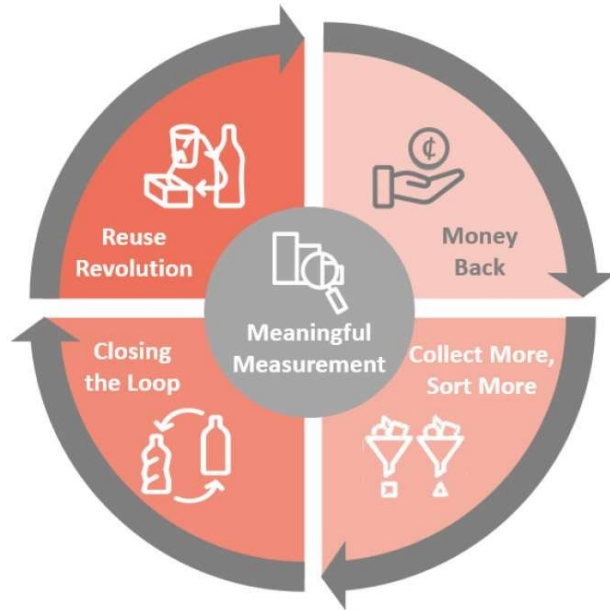
Contain plastic waste in purpose built landfills



Good practices



Continuous improvement



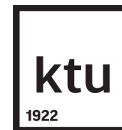
Thank you

Prof. dr. Žaneta Stasiskiene

Director of The Institute of Environmental Engineering

Kaunas University of Technology, Lithuania

Zaneta.stasiskiene@ktu.lt



REBECCA PRINCE-RUIZ



Rebecca Prince-Ruiz is the founder of Plastic Free July®, a global movement that helps millions of people be part of the solution to plastic pollution. Now in it's 11th year, the campaign has helped an estimated 326 million participants in 177 countries reduce single-use plastic.

With 30 years' experience in the world of environmental and waste management, community engagement, and sustainability behaviour change she has a unique perspective on the role of individuals in environmental issues. Rebecca believes it's critical to stop the problem at the source and believes we all need to take responsibility to change our throw away culture.



PLASTIC FREE JULY: How this initiative is reflected in cities?





Plastics - the symbol of our throwaway society



Plastic Free July® is a global movement that
helps millions of people be
part of the solution to plastic pollution —
so we all have cleaner streets, oceans, and beautiful communities.

One of the world's largest environmental movements
is delivered by **a charity** in Australia,
THE PLASTIC FREE FOUNDATION.

Who we are





2011 - from little things

**PLASTIC
FREE JULY**



2011 - 2021 Growing a global movement



Yes! I will take the challenge! >





Plastic Free July - grassroots change

PLASTIC
FREE JULY



CHOOSE TO REFUSE
SINGLE-USE PLASTIC
PLASTICFREEJULY.ORG

Diferentes comunidades alrededor del mundo están preocupadas por el plástico que termina en los botaderos y contamina nuestros océanos... por eso 120 millones de personas en el mundo deciden formar parte de Plastic Free July

¿Te unes al desafío?

Únete a los esfuerzos por ayudar al ambiente. Escoge rechazar los plásticos de un solo uso durante el mes de Julio

Si, ¡me uno al desafío!

1. Visita la página web plasticfreejuly.org
2. Escoge qué vas a hacer
3. Evitar los empaques plásticos de un solo uso
4. Identifica items descartables que pueden terminar en el océano
5. Tener un estilo de vida libre de plástico
6. Escoge por cuánto tiempo
 - 1 día
 - 1 mes
 - 1 semana
 - Siempre

NO PRODUCIR DESECHOS, REDUCE TU HUELLA ECOLÓGICA, PROTEGE EL OCEANO. PLASTICFREEJULY.ORG



PLASTICFREEJULY 2019
JOIN THE CHALLENGE

10c

FREE

AINSLIE IGA

Please join our effort to help the environment. Bring your own bag, take a free box or buy a paper bag for your groceries.



Plastic Free July - grassroots change

PLASTIC FREE JULY



1.

**Empowering
individuals**



2.

**Sharing positive stories
of solutions and impact**



3.

**Systemic change driven
by a groundswell of
community engagement**

How our evidence-based change approach works

A man and a woman are smiling and holding reusable cups at an outdoor market. The man is wearing a patterned shirt and a lanyard, and the woman is wearing a white shirt and a lanyard. They are standing under a green umbrella. In the background, there are other people and market stalls.

Behaviour change

leads to the spread of ideas
which shift our social norms and
change community expectations
of business and government –
behaviour change is the seed of
cultural and system change.

Colin Ashton-Graham, Behavioural Economist

How our evidence-based change approach works

**PLASTIC
FREE JULY**

326 Million participants

adopted 228 million 'choose to refuse' behaviour changes



Stories of change

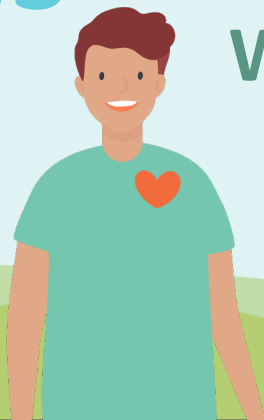
are shared with others telling about baking, recycling, switching to unpackaged goods, litter clean ups, school projects and community and workplace events

900 Million kgs of plastic waste avoided

including millions of single-use drink bottles, coffee cups, packaging, straws and plastic bags

Well-being

They have a positive sense of well-being, which increases with participation in Plastic Free July



↓ 21 kg each

The participants reduced their waste and recycling by 21 kg per person per year (almost five per cent)

15% more likely to reduce waste

Plastic Free July participants are ahead of the global trend, being more likely to adopt plastic waste avoidance behaviours



92% support action to reduce plastic waste

by consumers, by producers, by retailers, and by government



92% support action to reduce plastic waste

by consumers, by producers, by retailers,
and by government

Making a difference

PLASTIC
FREE JULY



Making a difference in cities

PLASTIC
FREE JULY



info@ plasticfreejuly.org



Plastic Free July 2021 - join the challenge



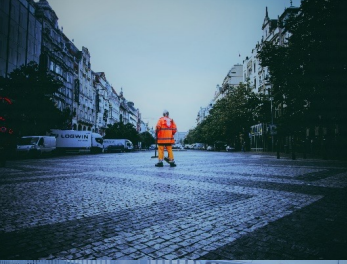
JELENA BARBIR



Dr. Jelena Barbir (PhD, MSc, MSc, BSc) has joined the FTZ-NK team at the Hamburg University of Applied Sciences in 2019 as an expert in the H2020 project management. With over 5 years of experience in the H2020 proposals development, she now leads the BIO-PLASTICS EUROPE project, funded by the Horizon 2020 Programme. She has a strong background in sustainable development, conservation of biodiversity and environmental sciences. Her current research focus stands on environmental sustainability, bio-based and biodegradable solutions and climate change.



Network of Historic Cities against Plastic Waste (HISCAP)



HISTORIC CITIES AGAINST PLASTIC WASTE (HISCAP)

Dr. Jelena Barbir
HAW Hamburg

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 860407



WHY historic? WHY plastic?

Europe has more than 500 million inhabitants and also attracts **tourists** from all over the world. Not all of them dispose of their waste properly: disposable plastic bottles and dishes end up in urban waters or are left by the roadside. **Plastic waste** in particular poses an enormous challenge.



COVID-19: worsening the problem

While COVID-19 has limited the stream of tourists in many cities, it has been reported that plastic waste has increased around the world. The challenge therefore remains for historic cities, given their aged infrastructure.



Vision

HISCAP seeks to support especially historic cities and municipalities in need of the latest knowledge and effective, real-life solutions to cope with the many problems caused by plastic waste.

HISCAP



Rationale

- ✚ Elimination of problematic or unnecessary plastic packaging through redesign, innovation and new delivery models
- ✚ Shift away from single-use plastics towards reusable packaging
- ✚ Design of recyclable, compostable and/or reusable packaging
- ✚ Improve the sorting of complex waste streams to improve quality of recycling output
- ✚ Provide necessary infrastructure to allow processing of compostable packaging



plastic straws



glass + silicone +
metal straws



plastic containers



mason jars



water bottles



stainless steel
water bottles



plastic ice cube trays



silicone ice cube trays

Mission of HISCAP

The HISCAP members are committed to undertake the following actions with the BIO-PLASTIC EUROPE project partners, in order to implement appropriate sustainable solutions on local levels:

- Knowledge transfer between their administrations
- Exchange of best practices
- Capacity building

We collaborate with other networks ...

Association des villes pour la propreté urbaine (AVPU)

- 2010
- 120 French cities
- <http://avpu.fr/qui-sommes-nous/>

Association of Cities and Regions for sustainable Resource management (ACR+)

- Exists for 25 years
- 1100 cities (Europe)
- www.acrplus.org

+Network of Municipalities “MiPuebloSinBasureza” - SPAIN



Benefits for the cities

Free
participation in
virtual events
and workshops

Knowledge
transfer and
sharing best
practices between
stakeholders

Showcase own
best practices on
plastic waste
reduction action

Management of
plastics, bio-based
and biodegradable
plastics and bio
waste

Access to latest
European bio-
based plastics
research

Events

Connect cities
Preparing events
Exchange experience
Offer solutions

First event
17th of
September



Second event
15th of
December



Preserve tourism
Minimize urban littering
Unconventional practices



Membership

The network involves stakeholders of historic and further cities who are involved in the planning, management or operations of waste on public grounds.

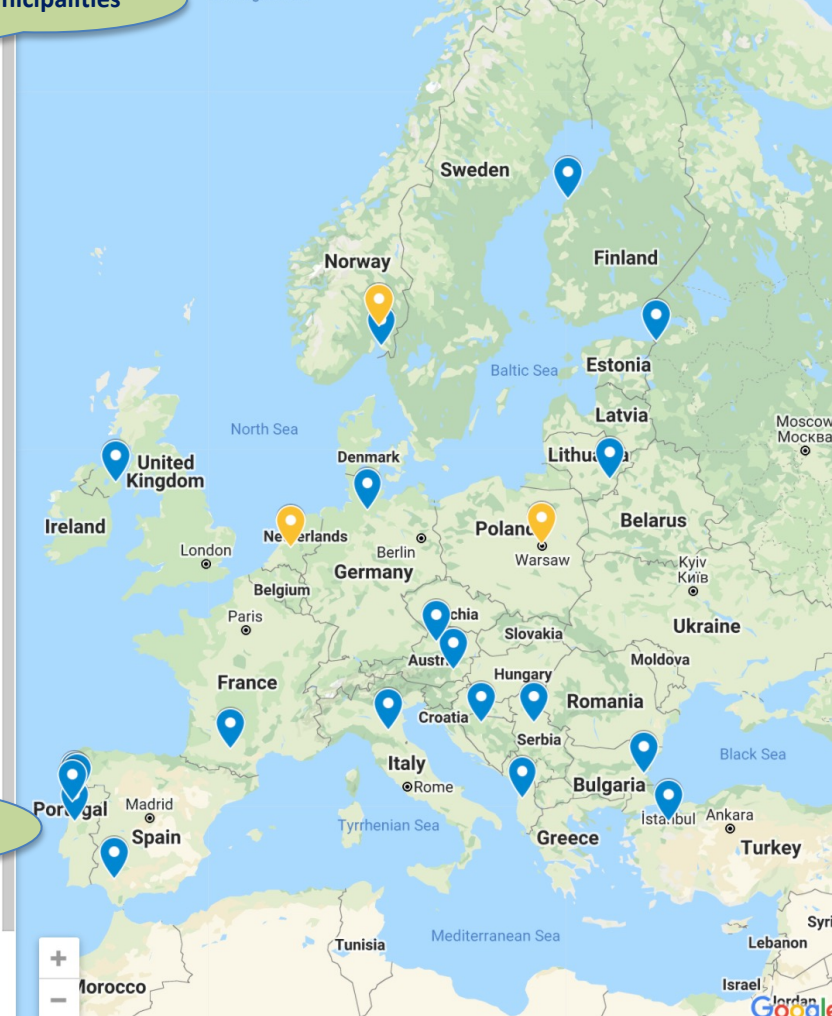
MUNICIPALITIES ...

- Banja Luka, Bosnia and Herzegovina
- Belfast, UK
- Belgrade, Serbia
- Bologna, Italy
- Braga, Portugal
- Burgas, Bulgaria
- Coimbra, Portugal
- Fredrikstad, Norway
- Graz, Austria
- Guimarães, Portugal
- Hamburg, Germany
- Jakobstadregion, Finland
- Linz, Austria
- Narva, Estonia
- Osmangazi, Turkey
- Porto, Portugal
- Seville, Spain
- Tirana, Albania
- Toulouse, France
- Vilnius, Lithuania

Agencies and Institutions

- Agency for Urban Environment, Oslo, No...
- HU University of Applied Sciences Utrecht
- Department of Air pollution and Climate ...

Municipalities



How to become a member?



Official Member – certificate

Follower – join LinkedIn HISCAP



Register on
<https://bioplasticseurope.eu/networks>



Approval by the BIO-PLASTICS
EUROPE



Receive personal Membership
Certificate

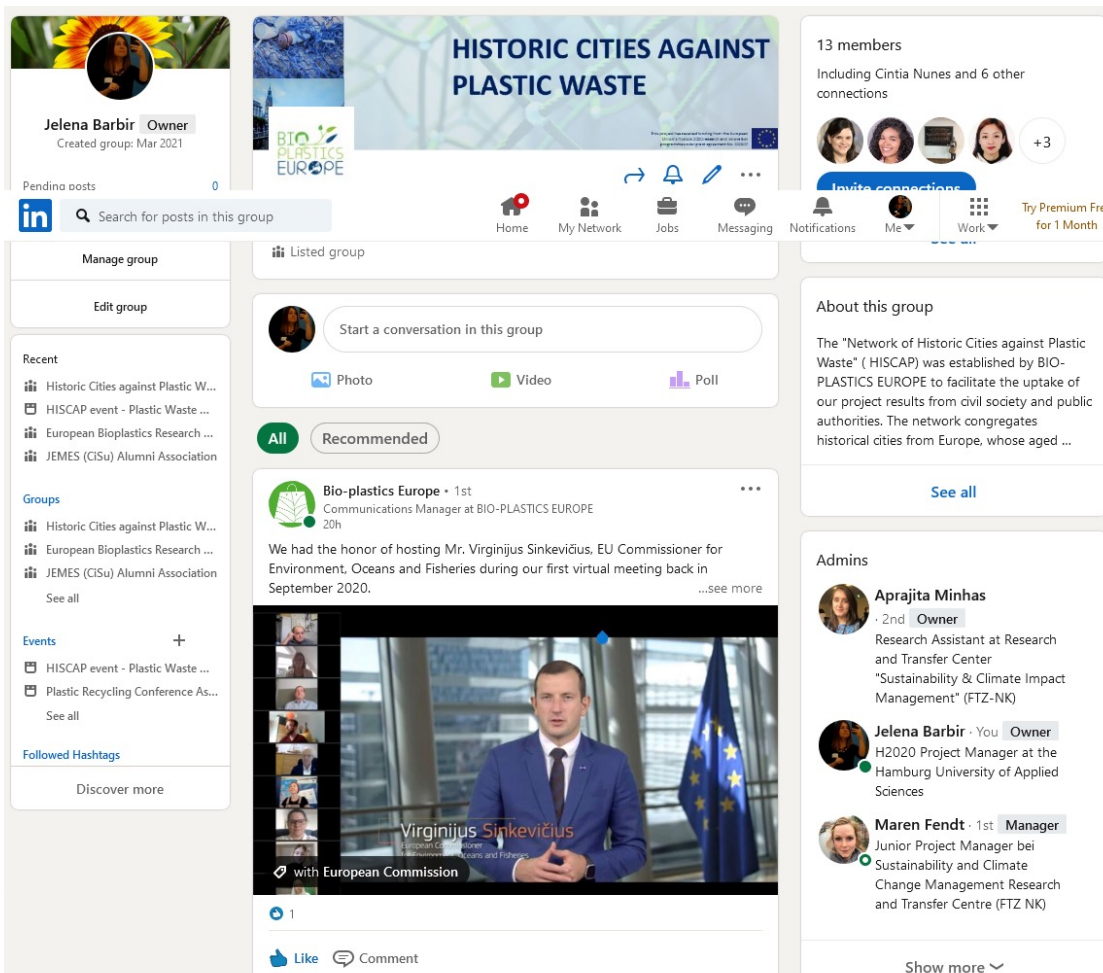
Go to the chat!

HISCAP group

JOIN US!

<https://www.linkedin.com/groups/9044005/>

LINK IN THE CHAT!



The screenshot displays the LinkedIn group page for 'HISCAP' (Historic Cities Against Plastic Waste). The group is owned by Jelena Barbir and was created in March 2021. It has 13 members, including Cintia Nunes and 6 other connections. The group's banner features the text 'HISTORIC CITIES AGAINST PLASTIC WASTE' and the 'BIO-PLASTICS EUROPE' logo. The page shows a recent post by 'Bio-plastics Europe' (1st Communications Manager at BIO-PLASTICS EUROPE) dated 20h, which mentions hosting Mr. Virginijus Sinkevičius, EU Commissioner for Environment, Oceans and Fisheries, during a virtual meeting in September 2020. The post includes a video thumbnail of Mr. Sinkevičius speaking. The right sidebar lists the group's admins: Aprajita Minhas (2nd Owner, Research Assistant at Research and Transfer Center "Sustainability & Climate Impact Management" (FTZ-NK)), Jelena Barbir (You Owner, H2020 Project Manager at the Hamburg University of Applied Sciences), and Maren Fendt (1st Manager, Junior Project Manager bei Sustainability and Climate Change Management Research and Transfer Centre (FTZ NK)). The bottom of the page shows a 'Show more' button.

Follow up...

SAVE THE DATE:

- DATE: 12th October 2021
- TIME: 10.00-12.00h CET
- TOPIC: “**Plastic Waste Management of European Coastal Cities**”
-and many activities and events to come in 2022!
- Stay tuned on our website: <https://bioplasticseurope.eu/news-events>



www.alamy.com - PKDF49

Lets stay connected!



Do follow us on social media channels
(LinkedIn, Twitter, Instagram, Facebook)

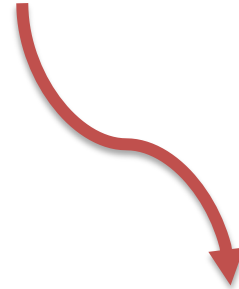


Subscribe to our newsletter

<https://bioplasticseurope.eu/newsletter>



Go to the chat!



THANK YOU FOR ENGAGING WITH US.....

HAMBURG UNIVERSITY OF APPLIED SCIENCES

Research + Transfer Centre „Sustainability & Climate Change
Management“ (FTZ-NK)

Ulmenliet 20 / 21033 Hamburg / Germany

T +49 40 428 75 6362 (Mon - Fri 8AM-3PM)

Email: bioplastics@ls.haw-hamburg.de

Website: <https://bioplasticseurope.eu/>

..... THANK YOU FOR YOUR ATTENTION!



HAW Hamburg



Horizon 2020