

# Zero Waste Live!

20 October 2020 - 02.00 p.m. CET



## THE BLOODY TRUTH ABOUT SINGLE-USE MENSTRUAL PRODUCTS



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# Single-use menstrual products **Impacts and measures to minimise them**

**Environmenstrual Week (October 2020)**

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- 3. Consumption rates**
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- 5. Costs for administrations**
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- 7. Benefits of reusable solutions**
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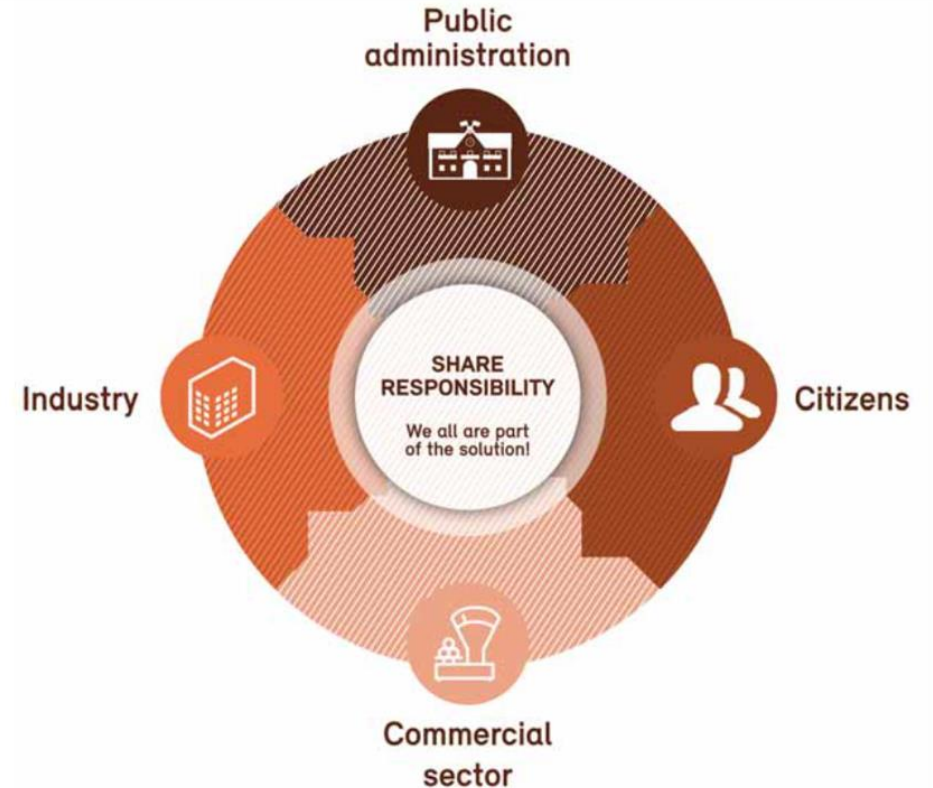


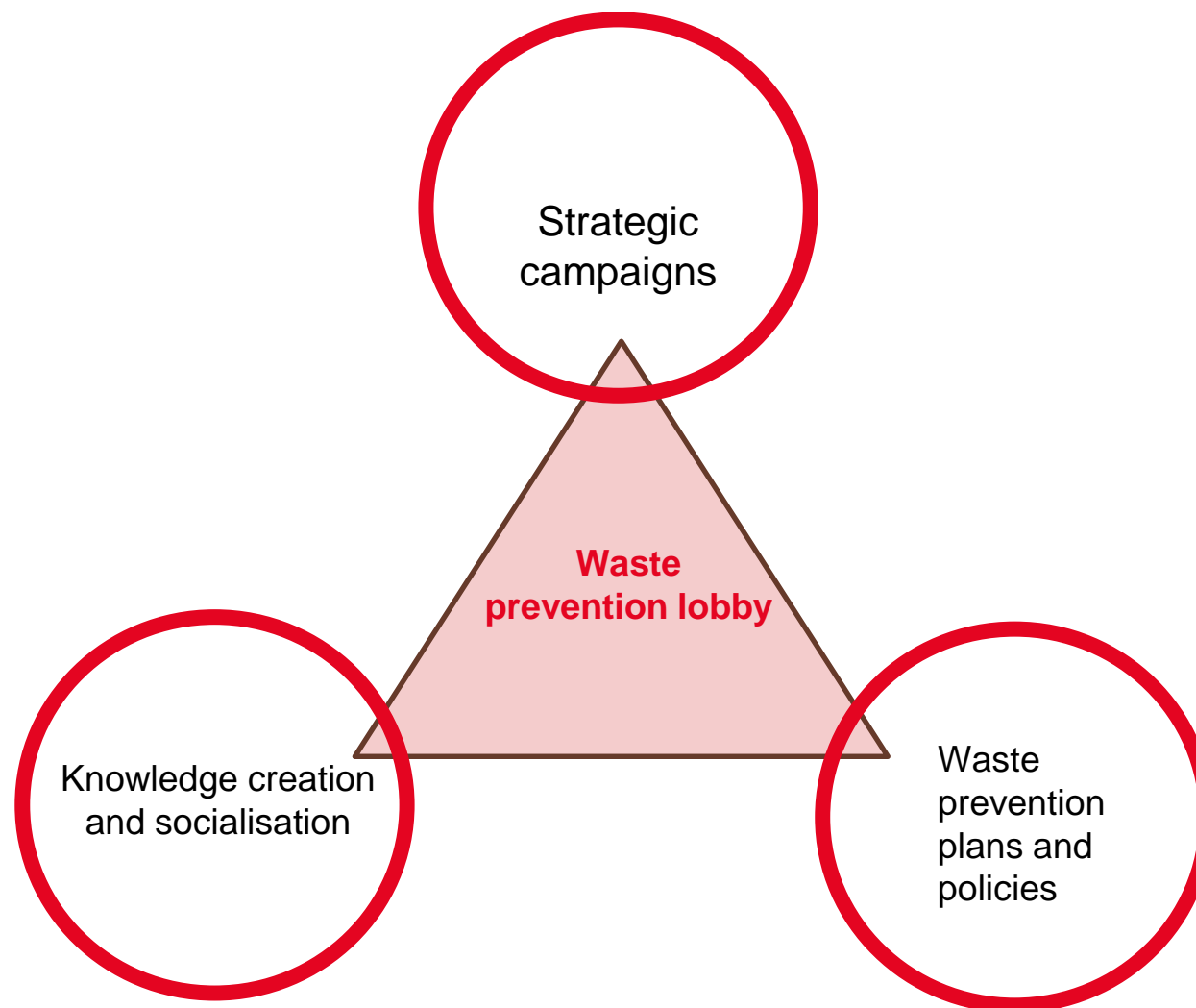
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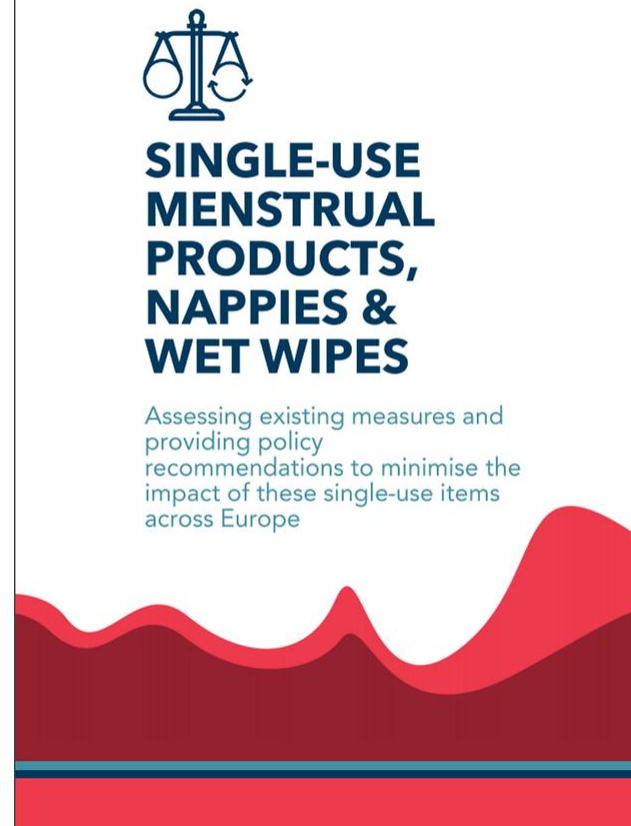
# 1. About us

## 1. About us

- We are an independent and non-profit organization born in 2005
- We want to change the consumption and production model towards Zero Waste
- We drive transforming actions and policies on waste prevention and responsible consumption networking with social and economic agents





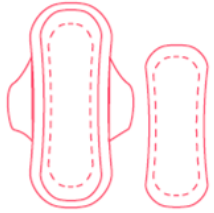


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## 2. Single-use menstrual products

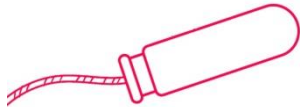


## 2. Single-use menstrual products



### Pads and Panty Liners

- Made out of **90% plastic**. Polyethylene is the most abundant plastic (polyolefins being part of its family), with other materials also used such as cellulose and SAP, adhesives and fragrances.



### Tampons

- Mainly composed of **absorbent materials** (over 90% of the tampon): rayon, cotton, polyester, or a mixture of these fibres, which are usually **bleached**.
- wrapped individually with a paper or a thin film and may come with an applicator of coated paper or hard plastic (polyethylene or polypropylene).

Many manufacturers do not specify all the ingredients used, although some of them might be harmful for the users and the environment (dioxins, furans, pesticides and herbicides residues, unknown fragrance and adhesives chemicals, BPA, phthalates, etc.)



# 3. Consumption rates

## Consumption

- Official total production figures not available □ estimations based on consumption rates
- About **23% of the total population** menstruates <sup>(1)</sup> and uses menstrual products regularly (118,213,566 persons)
- Each menstruating person uses about **14,000 menstrual products in their lifetime** (32 products per period, 416 annually)
- In the EU-28 nearly **50 billion units** of single-use menstrual products were consumed in 2017

(1) females of reproductive age (13-49)



## 4. Environmental impacts

## Material, water and energy use

- Use of **large volumes of wood pulp, cotton, or viscose rayon** for the production of **super absorbent polymer (SAP)**, and other components such as **polyester, polyethylene, polypropylene, adhesives, fragrances and dyes**.
- Use of significant amounts of water and energy

## CO2 emissions

1 year of menstruation per person emits **5.3 Kg of CO2 eq.** <sup>(1)</sup>

(1) Technology and Operations management (2016). The Ecological Impact Of Feminine hygiene Products. MBA students Perspectives. <https://rctom.hbs.org/submission/the-ecological-impact-of-feminine-hygiene-products/>



## Waste generation

- If the weight of a period is 384g <sup>(1)</sup> and a woman has 13 periods per year and menstruates for 36 years, more than **180kg** of single-use menstrual products are thrown away in a single lifetime for one menstruating woman (5 kg annually).
- In EU-28: **590,000 tonnes** of single-use menstrual products are generated annually

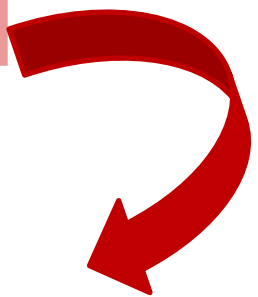


x 300

(1) London Assembly. Environment Committee. (2018). Single-use plastics: Unflushables. UK

## Waste generation

| Waste categories                         | Waste generation (tonnes) | Percentage of the total municipal waste (%) | Percentage of the total residual municipal waste stream (%) |
|--|---------------------------|---|---|
| Menstrual products + nappies + wet wipes | 7,832,000                 | 3.1   | 4.0   |
| Municipal Solid Waste (2017)             | 248,653,000               |   |   |
| Residual municipal waste stream          | 186,489,750               |   |   |



This percentage increases in regions presenting higher separate collection rates for other waste streams.

Example: in the Catalan municipality of Argentona (selective collection of 88%), 30% of the waste collected as residual fraction corresponds to these single-use products

## Waste management

- Made of mixed materials + presence of organic material after use = recycling difficult and economically expensive.
- These products typically end up in **landfills (87%)** or are **incinerated (13%)**



Impacts

- Waste of resources
- high land occupation rates
- groundwater and soil contamination
- greenhouse gases emissions



## Marine litter

- Among top 10 single-use plastic items most commonly found in the EU marine environment (“sanitary applications” as the **fifth** most common, EC).
- Flushed down the toilet after use and thus, they may enter the marine environment through the waste water release system (in particular, during storm events, the overflow resulting from high water levels and rainwater is discharged into waterways).
- They cause pollution: release of chemical components and microplastics, visible and physical damage



## 5. Costs for administrations

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- **Waste management** (menstrual products+nappies +wet wipes): collection and treatment costs can range **from €3 to more than €10 per inhabitant per year**, depending on the country.
- As regarding the **maintenance and unblocking of the sewer facilities**, it is estimated that the cost of waste disposal for sewage debris removed from **wastewater treatment plants**, equates to between **€500 - €1,000 million per year** for the European Union <sup>(1)</sup>
- Coastal municipalities must assume the high costs of **removing these products from beaches**. Example: in UK the removal of single-use menstrual products, wet wipes and other related sewage debris from beaches is estimated to cost about €1.1 million annually <sup>(2)</sup>



(1) EurEau (2014). Toilets are not a bin. Wet wipes and care products are not flushable materials. Brussels, Belgium.  
(2) Mouat, J., Lozano, R. L. & Bateson, H. (2010). Economic Impacts of marine litter. KIMO International, 105 pages

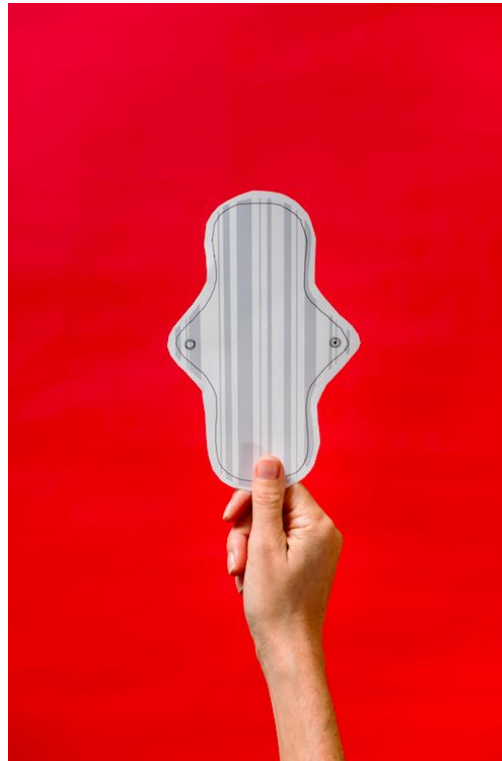
## 6. Solution: Reusable menstrual products

### Most common types of reusable menstrual products

**Reusable Menstrual Cup**



**Washable Cloth Pads**



**Period Underwear**



## Growing popularity and availability

- Menstrual cup global market is expected to grow (annual growth rate of around 4.6%) from 2017 to 2023 <sup>(1)</sup>.
- In UK reusables already make up 5% of the menstrual products market <sup>(2)</sup>
- Easily found in online shops in many regions but their availability in pharmacies, supermarkets, local shops or in handicraft shops depends on the country.

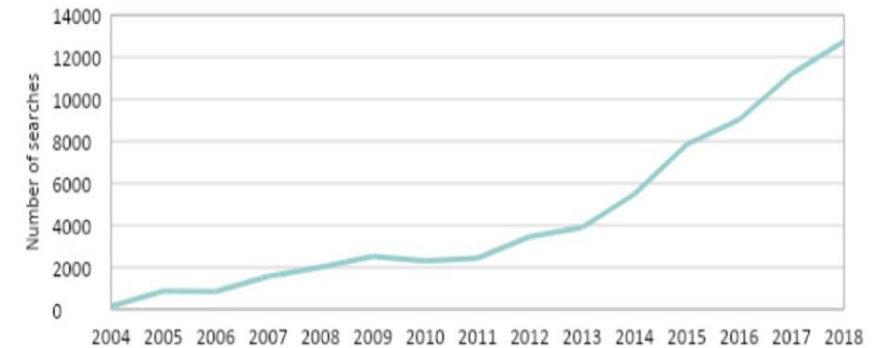


Figure 13: Popularity of search term "menstrual cup" in EU-28 (2004-2018). Source: Own elaboration based on Google Trends index of search terms.

(1) Research and Markets (2017). Menstrual Cups Market. Global Industry Analysis, Size, Share, Trends and Forecast 2015-2023.

(2) London Assembly. Environment Committee. (2018). Single-use plastics: Unflushables. UK

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## 7. Benefits of reusable solutions

## Menstrual cup better environmental performance (LCA)

- During one year, it produces the least amount of abiotic depletion, fossil fuel depletion, global warming potential, acidification and eutrophication compared to single-use menstrual products (pads and tampons with and without applicators).
- Menstrual cup require 0.04 kg CO2 eq. in one year (compared to 5.26 kg CO2 eq. of using single-use products for a year)



99% reduction (5.22kg annually)

**Toxic – free products** (free from dyes, BPA, toxins, pesticides or bleaches...), **safe and effective.**



(1) Wood, L. (2016) A menstrual cup? Is that what is sounds like? Gross. The Eco Guide



## 7. Benefits of reusable solutions

### Waste prevention

|                              | Average weight of one used item (g) | Number of items used per year | Menstrual waste (g/year) |
|------------------------------|-------------------------------------|-------------------------------|--------------------------|
| Single-use menstrual product | 12                                  | 416                           | 4,992                    |
| Menstrual cup                | 20                                  | 1                             | 4                        |

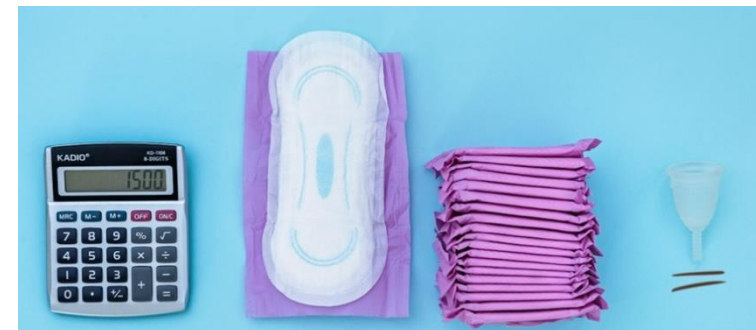
➔ 99% reduction

- If only 20% of menstruators would opt for reusables nearly **100,000 tonnes** per year would be saved in EU-28
- Prevent marine litter as they are unlikely to be flushed down the toilet or abandoned in the natural environment.

## Economic savings for consumers

|                              | Number of items used per year | Number of items used in a lifetime of menstruating for one woman | Cost per unit (€)                       | Annual cost (€)     | Lifetime cost (€)          |
|------------------------------|-------------------------------|--|---|---------------------|----------------------------|
| Single-use menstrual product | 416                           | 14,976   | Pad: 0.05 – 0.15<br>Tampon: 0.05 - 0.30 | 21 – 62<br>21 – 125 | 749 – 2,246<br>749 – 4,493 |
| Menstrual cup                | 1                             | 7 (life span of 5 years)   | 15-30                                   | 2-6                 | 105-210                    |

annual savings of **€18 to €119** and over a lifetime savings could exceed **€4400**



## Economic savings for consumers

- **Gender inequality:** costs of menstrual products disproportionately affecting cis-women, trans persons and non-binary individuals, who typically have less disposable income (EU gender pay gap of 16%)
- **Menstrual poverty:** nearly one in five women struggle to pay for basic single-use menstrual products on a monthly basis in the EU
- **Period Tax:** period products are currently classed as luxury or non-essential items by the EC, so they can be taxed in member states. Almost half of the 28 EU Member States continue applying the same VAT on menstrual products as on jewellery, wine, beer and cigarettes.



## 8. Existing measures and policy recommendations

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### Legal framework

|   | Main points  |
|---|--|
| <b>Waste management</b> <ul style="list-style-type: none"> <li>- Directive 2008/98/EC – Waste Framework Directive</li> </ul>  | <ul style="list-style-type: none"> <li>- Included in the scope of municipal waste</li> <li>- No specific regulation addressing their waste management</li> <li>- Not collected separately and therefore end up into the mixed municipal waste bin</li> </ul> |
| <b>Medical devices</b>  | <ul style="list-style-type: none"> <li>- Not considered medical devices</li> </ul>   |
|  <b>Single-use plastics</b> <ul style="list-style-type: none"> <li>- Directive (EU) 2019/904 –SUP Directive</li> </ul> | <ul style="list-style-type: none"> <li>- Marketing/labelling requirements</li> <li>- Awareness raising measures</li> <li>- NO EPR obligations</li> </ul>   |
| <b>Product safety</b> <ul style="list-style-type: none"> <li>-Directive 2001/95/EC on general product safety</li> </ul>   | <ul style="list-style-type: none"> <li>- Considered as “safe products” (although recent studies have revealed associated health impacts)</li> </ul>  |
| <b>Urban Wastewater</b>   | <ul style="list-style-type: none"> <li>- Its disposal is not regulated</li> </ul>  |
| <b>European Strategies and communications</b> <ul style="list-style-type: none"> <li>- European Strategy of Plastic in a Circular Economy</li> <li>- European Green Deal</li> </ul>                     | <ul style="list-style-type: none"> <li>- Offer opportunity to address legislative gaps and to include sustainable product policies that promote reduction and reuse</li> </ul>   |

## 8. Existing measures and policy recommendations

### At Spanish level

|                           | Main points  |
|---------------------------|--|
| Balearic Waste Law 8/2019 | <ul style="list-style-type: none"> <li>- Article 22. Prevention and reusable measures: <b>promote the use of reusable and/or compostable menstrual products</b></li> </ul> |

## Policy recommendations

|  | Key recommendations   |
|--|---|
| European strategy to promote reusable                                | <ul style="list-style-type: none"> <li>- <b>Reuse targets</b> of 30% by 2030 and 60% by 2040</li> <li>- <b>EPR schemes with eco-modulation</b> of fees (cover full costs).</li> <li>- Binding requirements for manufacturers to <b>phase out hazardous chemicals and toxins</b></li> </ul>  |
| National initiatives in the framework of SUP Directive transposition | <ul style="list-style-type: none"> <li>- Expanding the scope of <b>EPR</b> to menstrual products (cover rise awareness, transport, collection and transport, clean ups...)</li> <li>- Invest in <b>subsidies</b> to fight menstrual poverty</li> <li>- Binding <b>consumption reduction targets</b> for single-use products and <b>reuse targets</b></li> <li>- <b>Reducing or eliminating</b> taxes on reusable products</li> <li>- <b>Making the availability</b> of reusable products mandatory in all retail outlets</li> <li>- <b>Clear and legible marking/labelling requirements</b> (appropriate waste management, impacts of littering, info on plastics and chemicals)</li> </ul> |
| Local initiatives towards zero waste cities and communities          | <ul style="list-style-type: none"> <li>- <b>Local waste ordinances and fiscal ordinances</b> including rebates for users of reusable products</li> <li>- <b>Individualised waste management systems</b> (e.g PAYT)</li> <li>- Rise awareness and communication campaigns (such as ZW challenges)</li> </ul>   |



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# More information:

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