



**URBAN
WASTE**
URBAN STRATEGIES FOR
WASTE MANAGEMENT
IN TOURIST CITIES



Substitution of disposable products in hotels

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Substitution of disposable products in hotels

What is the measure about?

Description and scope of the measure

This measure consists in the replacement of disposable products in hotels, including hotel rooms, common areas (e.g. dining rooms) and some services provided to customers (e.g. laundry service), if applicable. In this respect, by means of greener procurement policies, hotels can commit to buy recycled and reusable products and, on the other hand, minimize the purchase of disposable items.

Hotel rooms

One of the main problems of “welcome kits” in hotel rooms is the excessive plastic packaging of hygiene products for single use (e.g. shampoo, gel, etc.). In addition, these products are paid twice, as they include purchasing costs and waste treatment and management costs, which is something hotels can avoid by changing the purchasing policy.

In this sense, hotels can stop purchasing single-use products with individual packaging and start replacing, for instance, single-use bottles by soap and shampoo dispensers. Moreover, there is nowadays a large array of products that fit well into the decoration of the room while implying a waste prevention measure. In case some products must be purchased with individual packaging, hotels could try to select those having materials such as paper or cardboard and avoid plastic packaging.

A simple measure like the replacement of individual soap bottles in the bathroom by dispensers is estimated to reduce the total waste generated in hotels by 5 %.¹ Together with the replacement of soap bottles, fabric cloths could also be made available instead of disposable paper towels.

Dining rooms

Measures to be adopted in common areas include the replacement of disposable or plastic tableware and table cloths by reusable cutlery, glass bottles and table clothes made of fabric.

Hotel services

¹ *Guía de hoteles más sostenibles (2010). Ajuntament de Barcelona – Agenda 21 – Publicacions – Guías de Educación Ambiental*

(http://w110.bcn.cat/MediAmbient/Continguts/Continguts_Transversals/Educacio_Ambiental/Documents/Fitxers/Guia_Hotels_Sostenibles_CAT.pdf)

Laundry services in hotels normally use plastic bags to deliver clean clothes to customers. Often, these plastic bags end up as mixed waste or, in the best scenario, sorted as plastic waste to be recycled later on. Instead, hotels are advised to demand laundry services to replace plastic bags by fabric bags during transportation and delivery of clothes, towels, etc. This way, dirty clothes, towels, bed linen, etc. could be returned to the laundry service making use of the same fabric bags and be reused.

Integration in a waste management plan

The proposed measures for replacement of disposable materials could be embedded in the procurement policy established in the hotel. Moreover, hotels are usually certified against Environmental Management Systems (e.g. ISO 14001, EMAS, etc.) which include a waste management plan with different implemented measures and actions.

Furthermore, depending on the municipality, region or country, there exist specific regulations as to waste generation from businesses, including hotels, which could integrate goals and objectives of commercial waste generation, especially on a municipal level.

How to implement this measure?

Economic aspects to consider and potential solutions for the financing of the measure

Costs

- Costs related to the acquisition of reusable products (i.e. table cloths, naps, etc.) or dispensers to substitute single-use products. Although these costs would be more elevated at first, in the long term it will lead to cost savings.

Cost savings

- Replacing single-use bottles for dispensers can lead to a reduction of acquisition costs. As explained below in one of the best practices identified, the “Hotel Pastor Park Plaza” saved up to 0.20\$ per overnight stay².
- The amount of plastic waste generated would be reduced and with this, the costs of treating it. Taking as a reference the average costs in EU of incineration or landfilling, avoided costs would be³:
 - Incineration of residual waste: 64€/ton
 - Landfilling residual waste: 56€/ton

Type of stakeholders to involve

For the effective introduction, implementation and continuous operation of the proposed measures a number of key stakeholders should be involved. These include:

- Hotel managers
- Maintenance and housekeeping department at the hotel (responsible person, cleaning staff, etc.)
- Product suppliers
- Customers
- Waste management company/local authority in charge of municipal waste collection

Other possible stakeholders

- Waste management department of local authorities
- Hoteliers associations

Description of the operational steps to follow

² *Guía de hoteles más sostenibles (2010). Ajuntament de Barcelona – Agenda 21 – Publicaciones – Guías de Educación Ambiental*

(http://w110.bcn.cat/MediAmbient/Continguts/Continguts_Transversals/Educacio_Ambiental/Documents/Fitxers/Guia_Hotels_Sostenibles_CAT.pdf)

³ Source : IPCC (https://www.ipcc.ch/publications_and_data/ar4/wg3/en/ch10s10-4-7.html)

At municipal level

- Mapping of hotels within the municipal boundaries and identification of green businesses and companies supplying eco-friendly products.
- Organization of informative meetings with hotels and hoteliers associations to promote the implementation of these measures.
- Realization of communication campaigns to engage more participants.
- Regulative support to encourage hotels to replace disposable products (for instance, by applying reductions in the waste fee, or establishing a territorial label promoting hotels with such measures implemented).

At hotel level

- The first step before the implementation of any measure should be the monitoring and assessment of waste generated in the hotel, including the identification of all waste fractions generated and their origin.

As the implementation phase should be supported and integrated in the purchasing policy, there is a number of actions to take in this respect:

- Once the real needs for purchasing have been identified (e.g. purchasing of plastic-free packaging soap for hotel rooms) and the objectives have been set, the purchasing policy should be revised and modified to meet the established goals.
- From that moment on, the requirements and objectives should be introduced in all provision and service contracts.
- requirements established (suppliers including environmental quality guarantees, ecolabels or certified against EMS will have higher chance to meet the hotel requirements)
- If there is an eco-label regarding that specific management, then the hotel could use a sticker to inform its clients about those eco-friendly actions.

As some of the measures are connected to the behaviour and commitment of hotel clients, it is very important to communicate with them about the environmental achievements so that they feel part of the initiative and become key participants in the reduction of generated waste.

Suppliers must be also informed and updated on purchasing policies and initiatives taken in the hotel, as this will reinforce collaboration with them and facilitate cooperation with other hotels interested in implementing similar measures.

Furthermore, hotel chains and associations sharing suppliers have more power and a better position to negotiate regarding environmental aspects and encourage the availability of environmental friendly products and services from suppliers.

Gender aspects to consider

Have men and women been consulted in deciding how best this can be done?

If women 'on the ground' participate in identifying how this can best be done, then this could be empowering.

Promoting the changes to guests may need to be gender sensitive (in that men and women use different products, and in different volumes).

Examples of good practices

- The Conca Park is a 205-room hotel in Sorrento (Italy) which proudly advertises its zero-waste achievement across their website. They undertook a number of initiatives to reduce their waste including replacing all single portion and disposable items, introduced water dispensers to reduce the use of bottled water, replaced a number of plastic items with recyclable or compostable materials and achieved over 80% recycled waste.⁴
- In Swaffham (Norfolk, United Kingdom) the “Strattons Hotel” found that when it used 25 ml luxury miniature guest bathroom amenities, only 30% of the product was used and the rest was turned into waste. As a result, the hotel now supplies soap and shampoo in dispensers.⁵
- The “Hotel Postor Park Plaza”, 3* (United States) replaced plastic bottles by dispensers. As a result of the implementation of such measure, two million plastic bottles were not generated as waste per year. This implied costs savings of up to 0.20\$ per overnight stay which could be invested in the acquisition of higher quality hygiene products for customers.⁶
- In order to make the Green Public Procurement (GPP) targets more compelling, the Tuscany Region (Italy) has issued the Regional Law n. 37/2012 on "Green purchases and guidelines for sustainable purchases in the public administration (amendments to the Regional Law n. 38 of the 13 July 2007). The article 3bis reads as follows: *“in order to enhance the protection of the environment, the Region promotes the integration of public procurement with environmental concerns and initiatives to orient citizens and operators of the public administration towards an environmentally sustainable behaviour, in compliance with European regulations and the national transposing law”*. The same Article 3 further introduces an important provision: *“to promote and encourage the advancement of a responsible behaviour towards the environment, in all cases where incentives are provided by the Region to local authorities, for actions that envisage procurement procedures for the acquisition of works, supplies and services involving green purchases, in the call the financing mechanism is subjected to a minimum percentage of at least 35% of green purchases”*⁷.

⁴ Conca Park Hotel – Zero Waste (<http://www.concapark.com/en/zero-waste-hotel-sorrento/>)

⁵ The greenest hotels in the land (The Guardian) (<https://www.theguardian.com/travel/2008/apr/24/green.hotels>)

⁶ *Guía de hoteles más sostenibles (2010)*. Ajuntament de Barcelona – Agenda 21 – Publicacions – Guías de Educación Ambiental

(http://w110.bcn.cat/MediAmbient/Continguts/Continguts_Transversals/Educacio_Ambiental/Documents/Fitxers/Guia_Hotels_Sostenibles_CAT.pdf)

⁷ D2.7 – *Compendium of waste management practices in pilot cities and best practices in touristic cities*. Urban strategies for Waste Management in Tourist Cities.

Guidance for setting up monitoring indicators

Two groups of indicators are to be set:

1. The first group aims at monitoring involved stakeholders:

- Hotels involved **[number]** & total number of hotels in the pilot area **[number]**

These two previous data will enable to compute the following indicator:

- Percentage of hotels involved: $\text{hotels involved} / \text{Total number of hotels in the pilot area} [\%]$

The pilot area can be the whole city or a part of it: down town, old town, port area...

- Mapping of hotels that implement the measure **[Name and address]**

- Rooms in the hotels involved that are equipped with dispenser **[number]**

- Total number of rooms in the hotels involved **[number]**

These two previous data will enable to compute the following indicator:

- Percentage of rooms that are equipped with dispenser: $\text{Number of rooms} / \text{Total number of rooms in the hotels involved} [\%]$

Hotels implementing the following measures:

- substitution of individually packaged single dose containers of shampoo, shower gel and soap with dispensers **[number]**
- sugar, jam, yogurt, butter, creams and similar food products served in bowls and jars **[number]**
- tap water offered **[number]**
- other: (specify).....**[number]**

- Single use containers purchased per day before measure was introduced **[number]**

- Single use containers purchased per day after measure was introduced **[number]**

- Soap and shampoo/shower gel dispensers purchased **[number]**

2. The second group aims at monitoring waste production in involved hotels and the performance of the measure:

- Quantity of plastic waste produced **[kg]** or **[number of bins or garbage bags] in rooms and in common areas**: the number of bins or garbage bags can be chosen as a unit of measurement if it is not possible to weight waste produced, the average weight of a fulfilled bin or bag will have to be estimated beforehand for further calculation
- Quantity of mixed waste produced **[kg]** or **[number of bins or garbage bags] in rooms and in common areas**
- Number of customers **[number]**
- Occupancy rate (n. of rooms occupied / total of rooms) **[%]**

Time frame

It is recommended to start the monitoring at least one week before dispenser are installed to assess the effect of the measure on waste production.

Quantity of waste produced and number of customers can be registered **continuously** (every day every week) or **randomly** (one day per week or every day one week per month).

Gender considerations:

- Who makes ultimate decisions in establishment? [male-female]
- Who will undertake work? [%female]
- Have those who undertake work been consulted in how to do [yes-no]
- Approximate gender distribution of extra work involved? [% female]
- Which guests ask for individually packaged toiletries? [% female]

Lessons learnt from the implementation phase and fine tuning



Pilots implementing substitution of disposable products in hotels within URBAN-WASTE

In **Lisbon**, the measure was implemented in **169 rooms** of 1 Hotel in Lisbon, where disposable products were replaced by dispensers. In **Ponta Delgada**, 2 hotels were involved accounting a total of **213 rooms** equipped with dispensers.

A reduction of **19% of unsorted waste** was reached in Lisbon although the hotel occupation rate during the monitoring phase was only 62%.

1,350 kg of plastic waste were avoided in both hotels, and **1,620 kg of paper waste** were avoided in one Hotel.

Key points

- Plan the implementation of this measure well in advance of peak tourist season which needs time to be correctly organised.
- Strong efforts is necessary to mobilize hotels and increase their participation.