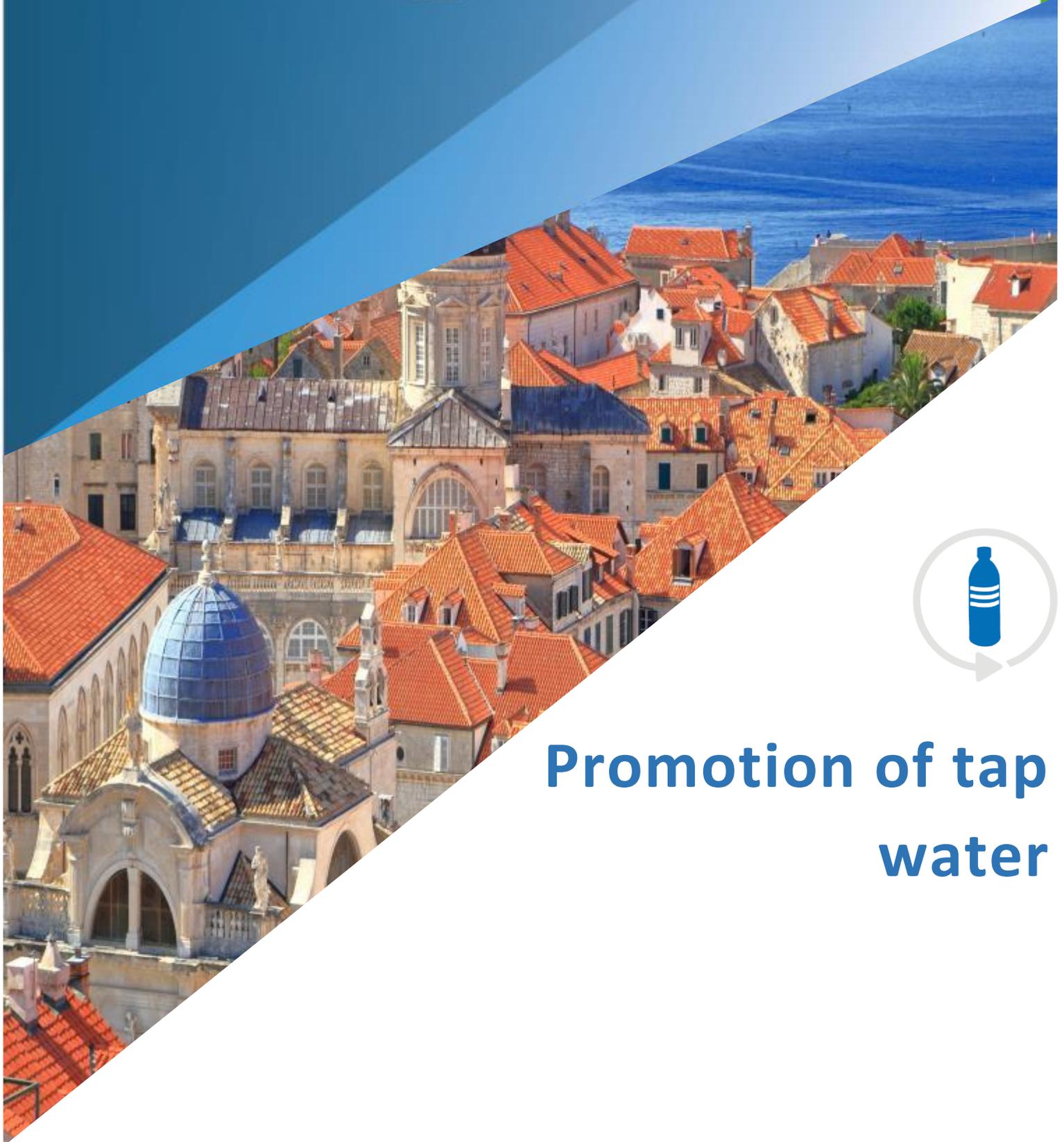




**URBAN
WASTE**
URBAN STRATEGIES FOR
WASTE MANAGEMENT
IN TOURIST CITIES



Promotion of tap water





Promotion of tap water

What is the measure about?

Description and scope of the measure

The promotion of tap water aims at decreasing the consumption of bottled water, in particular PET bottles. Tourists are particularly big consumers of bottled water when on holiday, both directly through their purchases than through their tourist lifestyle (hotels, restaurants, etc.).

Promoting tap water can be done by combining different approaches:

1. raising awareness through an information campaign on the environmental impacts of plastic bottles (energy consumption, gas emissions, marine litter, etc.)
2. increasing and improving the accessibility to tap water in public and private commercial areas
3. promoting and distributing reusable bottles

These approaches are even more essential when targeting tourists as they might not be aware of the possibility of drinking tap water at their holiday destination, nor where the facilities are. Also, they might not be equipped with reusable bottles.

The accessibility of tap water is a key factor for the success of this measure. Thus, it might be complicated to implement in a municipality with few or no public drinking fountains, unless an expansion of the network of public fountains is planned. On the contrary, giving access to the location of the public fountains or other sources of tap water (e.g. restaurants and bars offering free tap water) will make this measure more efficient. Some cities have edited printed and digital sightseeing maps localizing water drinking fountains, or even created their own mobile app to promote tap water.

Besides, partnerships can be built with the private sector to provide tap water, as it has already been done in several places around the world. Tourist establishments such as restaurants, bars, cafes, hotels, camping sites, etc. are particularly relevant when it comes to providing tap water to tourists. There are already cases of some establishments offering free tap water on demand to people equipped with refillable bottles, or offering free tap water to their customers. Other establishments also filter and possibly carbonate the water to make it sparkling and sell it at a lower price than bottled water or give it for free.

The distribution of reusable bottles, during touristic events or in touristic places is also an efficient way to disseminate the measure and raise awareness. This can also be done through partnerships with the private sector or NGOs.

The efficiency of the measure will depend on the local social norms for drinking tap water. If drinking and providing tap water is not a common habit in the area of implementation of the measure, a strong commitment will be needed from the local government to raise awareness not only of the tourists but also of citizens and local business owners. Making attractive water fountains through design contest is a possible way to make it part of the tourists' experience.

This measure could be combined with other specific measures on tap water targeting tourists, such as the following examples:

- ban of beverages in plastic bottles in critical areas such as national parks
- green procurement in hotels including the ban of bottled water

Integration in a waste management plan

This measure could be related to the prevention plan of the waste management plan of the municipality. It should also be integrated in other urban plans, such as the local urban planning scheme and the water supply management plan.

At the scale of private establishments, this measure can be part of environmental policy established of these establishments. Moreover, restaurants and hotels can be certified against Environmental Management Systems (e.g. ISO 14001, EMAS, etc.) which include a waste management plan with different measures and actions implemented.

How to implement this measure?

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

Costs

- Costs associated to the expansion of the of drinking fountains network. For example, in 2008 the City Council of Edinburgh, estimated that the cost of installing one single fountain would be between £2.500 - £4.000¹. Maintenance costs should also be considered in the long term analysis.
- If maps showing the position of drinking fountains around a given area are printed, the promoter of the action would incur in expenses related to the printing of them as well as for the logistics. On the other hand, the same information could be shared with citizens through an application. Within the URBAN-WASTE project such application is already being developed and would be offered free of charge.
- Costs associated to the purchase of reusable bottles to be distributed among tourists and citizens free of charge.

Costs savings

- By using reusable bottles, there are cost savings in relation to the raw materials that are no longer needed to be extracted/processed for the production of plastic bottles. For example, in September 2017, the cost of virgin plastic ranged between 1.125 € - 2.070 €/ton in EU, depending on the type of polymer².
- Moreover, the municipality implementing this strategy will reduce the amount of plastic bottles to be disposed and treated, translating into a reduction in the costs of incineration or landfilling. As reference, the costs of these two treatment alternative in EU are³:
 - Incineration of residual waste: 64€/ton
 - Landfilling residual waste: 56€/ton

¹ Source: City of Edinburgh Council (2009). *Provision of Drinking Fountains in Edinburgh's Parks (Item no 7.1)*. Transport, Infrastructure and Environment Committee

² Source : <http://www.plasticsnewseurope.com/article/20171211/PNE/171219995/european-petrochemical-feedstock-contract-prices>

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

Financing options

- This measure can be funded through the communication campaign of the URBAN-WASTE project. For example, the application WasteApp will show the location of drinking fountains around the pilot regions and cities, free of charge.

By selling reusable bottles instead of being distributed for free among tourists or citizens, the municipality or other organizer promoting the use of tap water could receive a direct benefit in order to finance the initiative.

Type of stakeholders to involve

Municipal government

- Water supply and sanitation department of local authorities
- Waste management department of local authorities
- Urban planning department of local authorities
- Tourist establishments' managers (e.g. bars, restaurants, cafes, hotels, etc.)
- Private companies or organizations willing to participate in the implementation

Other possible stakeholders to involve

- Local NGOs in the field of environment protection

Description of the operational steps to follow

This measure could be initiated by the municipal government, with the cooperation and support of the stakeholders previously indicated. These steps should be followed in order to define the possible means that could be allocated to the promotion of tap water:

- analysis of the current practices regarding the use of tap water
- analysis of the existing sources of tap water supply (public water fountains and private establishments) and definition of the most relevant areas of implementation of the measure
- establishments of partnerships with tourist establishments for providing tap water to their customers and/or with other private companies or organizations (e.g. organizers of festivals and public events) for supporting the implementation of the action
- creation of the communication and promotional material (e.g. posters, maps/APPs, reusable bottles)

Gender aspects to consider

As waste management tends to be male dominated in most case studies, ensure women are specifically involved to achieve gender balance in particular those developing the idea.

Communication campaign needs to be gender sensitive to avoid favouring one sex or another in the wording or the pictures used.

Examples of good practices

- As part of the URBAN-WASTE project activities, a distribution of reusable bottles has been organized during the Florence marathon, targeting both runners and tourists. It had the double purpose of promoting tap water and reusable bottles and flasks and raising awareness on plastic waste.⁴
- The City of New York (USA) has launched since many years a campaign to promote tap water and to raise awareness on the impact of bottled water. This campaign aims at promoting the thousands of public water fountains of the city. Besides, the Department of Environmental Protection of the city has developed a program called “Water-on-the-go”. Within this program, portable drinking fountains are installed during the summer season in the most frequented areas of the cities, such as public places, city parks and busy pedestrian areas. An app has also been developed to help residents and tourists locate the public drinking fountains.⁵
- After evaluating that plastic bottles represented 20% of the Grand Canyon’s waste stream and 30% of the park’s recyclables, the Grand Canyon National park (USA) has banned the sale of water packaged in individual disposable containers including plastic bottles. Water bottle filling stations have been installed in the most frequented areas of the park, which provide spring water from the park. Reusable water bottles are also available on sell at the retail outlets off the park.⁶ In 2011, 23 American national parks had implemented such a measure.
- As part of the green policy of the Glastonbury festival (England) everyone is encouraged to bring reusable water bottles or to purchase stainless steel water bottle so that they can make serious reductions on the volume of plastic bottles onsite.⁷
- The Network Rail in UK will introduce in 2018 drinking fountains at all main railway stations as part of government efforts to encourage the public to carry refillable water bottles. The initiative has been proposed by the UK Parliament to airport operators and motorway service stations as well⁸.

⁴ <http://www.urban-waste.eu/events/urban-waste-incontra-turisti-e-maratoneti-piazza-duomo/>

⁵ Can the drinking fountain make a comeback? (<https://www.citylab.com/life/2015/07/can-the-drinking-fountain-make-a-comeback/399098/>)

⁶ Go Green and Refill Your Water Bottles (https://www.nps.gov/grca/planyourvisit/refilling_stations.htm)

⁷ Green Glastonbury (<http://www.glastonburyfestivals.co.uk/information/green-glastonbury/our-green-policies/>)

⁸ <https://www.ft.com/content/9c8777e6-06a6-11e8-9650-9c0ad2d7c5b5>

Guidance for setting up monitoring indicators

The following data can be collected:

Monitoring of actions, items, stakeholders and people involved etc.		total
existing public potable water fountains that are placed in tourist areas	[number]	
new public potable water fountains that are placed in tourist areas	[number]	
Does the tap water need to be purified before it is distributed through fountains?	[yes-no]	
If yes (purified) how	[specify]	
reusable flasks and bottle distributed	[number]	
reusable flasks and bottle sold	[number]	
Weight of reusable bottle	[g]	
Material of reusable bottle	specify	
bars and restaurants serving tap water	[number]	
Evaluation of people potentially reached by the communication campaign and surveys on the use of tap water	[number]	
Fraction of single use bottles recycled	[%]	
Other : specify.....		

Collect data on water distribution at public fountain:

Quantity of water distributed through the automatic public water fountains	[litre]
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Time frame

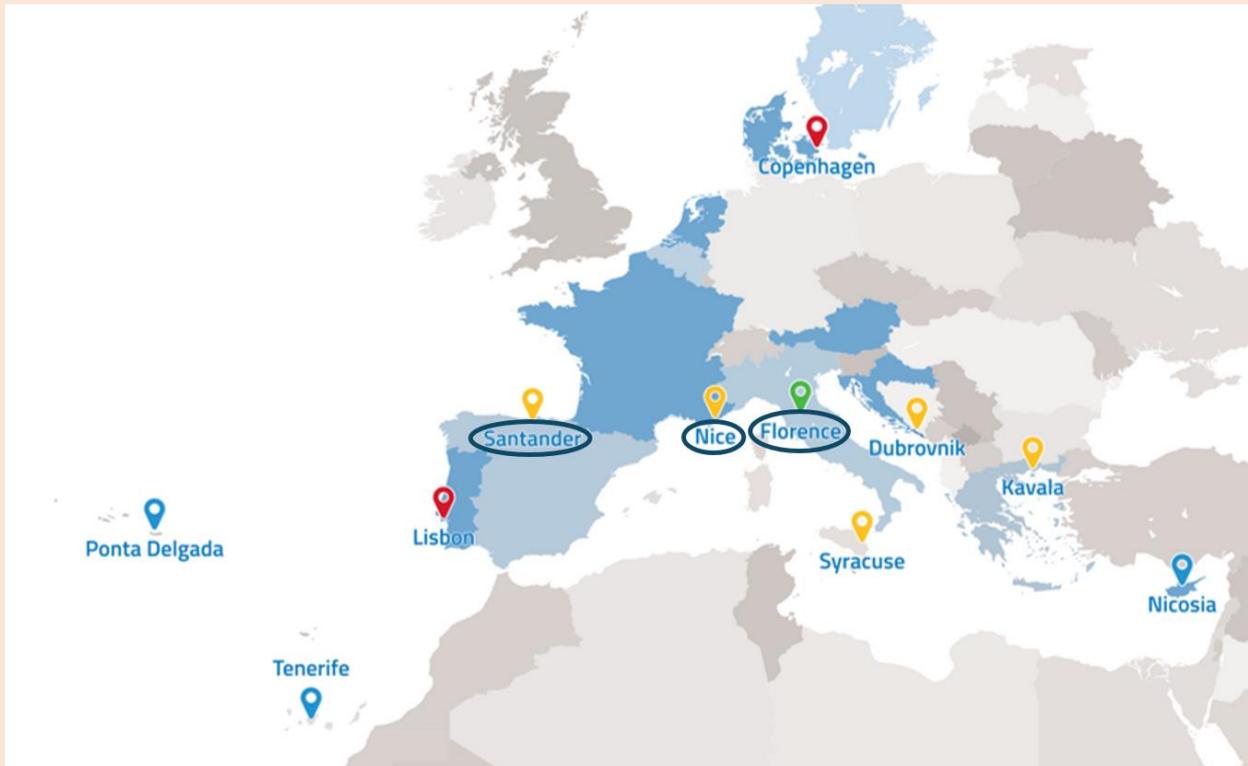
It is recommended to start the monitoring of public fountain at least one week before implantation phase to assess the effect of the measure on waste production.

Quantity of water distributed can be registered **continuously** (every day every week) or **randomly** (one day per week or every day one week per month).

Gender considerations:

- Do reusable containers suit women, men and children, and the bags they use? [yes-no]
- Are locations appropriate for women and men? [yes-no]
- Where an establishment, who is the ultimate decision [male-female]
- Is communications campaign gender sensitive? [yes-no]

Lessons learnt from the implementation phase and fine tuning



Pilots implementing promotion of tap water within URBAN-WASTE

In **Florence**, **2,250 flasks** were distributed to citizens and tourists during 4 events. 45,000 maps with the location of the 57 public fountains were distributed to tourists.

In **Nice Metropole**, **1,500 reusable plastic "eco cups"** have been distributed in tourist offices and on beach stands to tourists. Maps with the location of 30 public fountains were disseminated and stickers with the URBAN-WASTE logo and QR code for WasteApp.

In **Santander**, **421 reusable bottles** were distributed in different events. 102 public fountains have been identified and mapped in the WasteApp.

Florence and **Nice Metropole** have in parallel installed fountains (not in the framework of URBAN-WASTE) distributing fresh and sparkling water to promote Tap water in Florence and in Nice.

Key points

- Profit from the summer events (festival, concert, professional show) to disseminate eco cups and promote tap water in addition to media communication
- Focus more on the promotion of public fountains and distribution of flasks than on the involvement of bars or restaurants willing to distribute tap water. The loss of income it causes by giving up the sale of water bottles are too prohibitive.