

Cleaning up Canals in Venice

Tackling tyre pollution in the Venice Canals through the coordinated action of key local stakeholders



City/Project Site: Venice Historic City Centre Canals

Country: Italy

Key Impact Area: Collect & Manage/Recycle

Sub-Category: Awareness raising, Monitoring, Collection

Key Terms: #Collection #Tyres #Canals

Project Partners/Target Reach: Local Voluntary Associations, Local Government Authority, Local waste Management Company, local research centre Italian Institute for Marine Research (Cnr.Ismar)

Donor: Volunteer Activity by the Gondolier Divers, with support from Local Authority offices and partners with Private funds for the equipment

Timeline: 2019 - current

KEY SUCCESSES

Between February 2019 and April 2024:

- Tackling tyre pollution was integrated into the Venice Plastic Smart Cities Action Plan
- City authorisations obtained for regular canal clean-up
- Extensive media coverage and public interest for each cleaning session
- Linkages developed between Gondolier Divers (for clean-up), Venice City (for authorisation), Veritas (for waste management), and Ecopneus (for tyre end-of-life)
- 25 canal cleaning sessions
- 23,500 kg of waste collected
- 1,100 tyres recovered

BACKGROUND

Research by the Italian Institute for Marine Research (CNR-ISMAR) found the canals of the historic city center of Venice to be littered with a large amount of waste and in particular, car tyres; this is due to the common practice, especially by heavy load transport boats, of using tyres as boat fenders. These tyres, once lost, even if accidentally, don't get recovered, polluting the canal beds for years to come.



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Canal cleaning session



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Tyres collected



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Canal cleaning session

As Venice joined the Plastic Smart Cities initiative, the need to tackle the pollution of its canals was seen as a priority - especially the pollution due to car tyres commonly used as fenders in the maritime sector but formally an illegal practice. Countering tyre pollution was therefore included within the Venice Plastic Smart Cities action plan, on the one hand by supporting the cleaning of the canals and on the other by tackling the issue at source by encouraging the use of alternative solutions to the use of tyres.

Project Objectives

- Tackling tyre pollution in the Venice Canals;
- Collect and manage abandoned waste;
- Awareness raising to encourage the use of alternative solutions to the use of tyres and eventually modify the regulation for the coordination of local navigation in the Venetian lagoon to explicitly ban the use of tyres as fenders.

INTERVENTION APPROACH

The approach is two-fold, including:

1. **Multistakeholder engagement:** bringing together under the PSC banner all those stakeholders actively involved in highlighting and tackling the issue of waste and specifically tyre pollution in the Venetian canals and ensuring the waste is collected and managed effectively; and
2. **Identifying and tackling the root cause:** engaging in setting up the necessary steps to ensure the issue is solved at source, especially regarding the pollution caused by tyres as this is primarily due to the common practice of using tyres as boat fenders.

WWF ensured the issue was included and addressed within the PSC city action plan - for example, Initiative 2.3 aimed at the renewal of the Gondolier Diver authorisations to undertake cleaning sessions up to 2024, but also included the tackling of the effects of tyre pollution within the Venetian canals as the main focus of the action plan. Other activities included bringing together all key relevant stakeholders, such as CNR-Ismar and their research, the Gondolier divers and the cleaning sessions that they started undertaking during offseasons, the waste management company Veritas responsible for the correct management of the waste collected from the canals, but also Ecopneus, one of the main consortium companies in Italy for the tracing, collection and treatment of End-of-Life Tyres. Other activities included the preparation of a legal analysis document that was shared with the Venice Municipality to support the process initiated to modify the local navigation regulation to explicitly ban the use of tyres as fenders.

RESOURCES

The clean-up activities are undertaken on a voluntary basis by the Gondolier Diver Association (13 divers in total). The cleaning collection sessions require the active involvement of local council staff to coordinate the closing of the canals for the cleaning sessions and the management of all material collected through Veritas, the local waste management company - the funding for this is covered through annual waste fees paid by Venice through taxes collected from citizens and businesses. Diving equipment was donated by local partners and the Venice local authority grants the free use of a council warehouse in Cannaregio to store the materials and equipment needed to carry out the cleaning operations.

RESULTS

The interventions started in 2019 and are ongoing; the city of Venice has authorised the clean-up activities through three Local Authority Council Resolutions released in 2019, 2021 and 2022 (DGC 233/2022). To date, 25 canal cleaning sessions have been undertaken, 23,500 kg of waste has been collected (including 1,100 tyres).

Positive Outcomes/Impact

The biggest impact has been the cleaning of the canals and the big media coverage and exposure that the cleaning sessions have received. This coverage helps highlight the need to tighten local regulations to avoid the dispersion of waste within the canals. This is particularly true for the use of tyres as fenders, a common practice for the owners of commercial boats, which is however strictly speaking forbidden.

CHALLENGES

- The cleaning sessions are reliant on the voluntary activity of the gondolier divers and are therefore currently undertaken on a seasonal basis and authorised through local council resolutions that need to be renewed on a regular basis;
- The sessions currently focus on secondary canals, the cleaning of primary canals will require more bespoke equipment as well as the involvement of other relevant stakeholders to authorise and coordinate the closure of the canals during the cleaning sessions;
- The biggest challenge appears to be the modification of the local navigation regulation, to explicitly ban the use of tyres as fenders. The process requires the involvement of many different stakeholders as well the need to change a habit (the use of tyres as fenders) that despite not being legal has become the norm.

REPLICATING & SCALING

The approach could be relatively easy to replicate, it would require the involvement of dedicated volunteers to ensure sustainability and success. In the case of canal clean-ups, committed local diver associations as well as the technical equipment and skills to safely undertake the diving sessions is needed. It is also important to plan for proper management of the materials recovered from the clean-up.

Enabling Factors

Availability of a committed group of volunteers or local diver associations in the case of canals or other water bodies, as well as the local authority's direct involvement for possible authorisation requirements, and to coordinate the temporary closure of the water bodies during the cleaning activities, and waste management company to correctly manage the waste collected.

SUSTAINABILITY

The gondolier diver cleaning sessions are running independently. Through the Plastic Smart Cities Initiative, we have managed to link these activities to other projects and activities being undertaken locally by other local stakeholders such as by the Italian Institute for Marine Research (CNR-ISMAR) that can, for example, support the effectiveness of the interventions through the mapping activities that they are undertaking in the local area.

RECOMMENDATIONS

- **Engage with key stakeholders** that can enable or support the development of the activity, such as local research centres, voluntary groups, other active projects within the area, so as to enhance the available resources.
- Ensure that **the visibility and success** of the cleaning sessions are **used to re-enforce** the need to tackle plastic leakage into the environment at source also through local legislation.



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