

Waste management and water conservation with REAJ Spain



Our Nature

Managing waste
& water



National Association

REAJ – HI Spain

Hostels

- As Corcerizas (Ourense)
- Espinosa de los Monteros (Burgos)
- Twentytu (Barcelona)

SDG Contribution



Summary

REAJ is composed of more than 290 hostels, but REAJ isn't the owner of them. Our biggest challenge is involving all Spanish hostels in our sustainable mission. Many of our hostels already develop interesting sustainable projects, and we want them to share their knowledge and experience, in order to achieve the 100% of Spanish hostels involved with sustainability.

This document shows the sustainable projects of three Spanish hostels to protect the environment.

Objectives

We want to prove that a more sustainable tourism is possible, and we want the 100% of Spanish hostels to get involved with sustainability in its three great areas (economic, social and environmental).

Economic

Reduced costs from purchasing in bulk
Better value for money for guests

Social

Local collaboration
Raising awareness about the water and waste management

Environmental

Increased environmental awareness
Reduce CO2 emissions
Saving water and reducing waste



Methodologies

Hostel: Espinosa de los Monteros , Burgos

Espinosa de los Monteros is a very special hostel, because they develop many activities about sustainability. They teach children that sustainability is essential to ensure the survival of our planet.

Last year they were awarded by REAJ with more than 4.000€ to create **an organic vegetable garden**, in order to show young people how to grow their own healthy food and how to transform waste into compost.

This year they want to collaborate with HI's campaign and they're working in **a video to show the world the importance of reduce and reuse waste**.

This video will be not only about environmental sustainability, but also about economic and social sustainability, since they'll show the life of the "Pasiegos", who are an old ethnic group in the north of Spain who had been managing their waste and saving water since many centuries ago (Indeed, they don't use the word rubbish because they generate no waste). This video will be released by March in order to join the 2017 UN Year of Sustainable Tourism. The video will have subtitles in English, so that people all around the world can understand it and learn.

In addition, it's important to say that this hostel share all its best practices with all their customers, so **everyone who sleeps at this hostel learns about the importance of protecting the environment**. This hostel also hosts camps about Nature with children from different schools.



Hostel: As Corcerizas, Ourense

**This hostel was awarded with the HI Sustainability Fund in 2013, which helped them to implement a wind turbine generator and other sustainable initiatives.*

As Corcerizas, the **Environmental Educational Centre** located in the Sierra de San Mamede, province of Ourense, is an example of the **bioconstruction and bioclimatic architecture** that is promoted by Amigos da Terra. Since its creation it has been considered a pioneer facility in Galicia, exemplifying the possible sustainability of the relationship between people and their surroundings, maintaining consistency between the buildings and the educational function of this association.



The design and construction of these buildings used for environmental education follows the norms and criteria of the bioclimatic architecture and consists of 4 principal buildings: a school room, a dining hall, a hostel and “The House of Energies”, where the systems of production and distribution of energy are centralized, as well as other complementary constructions.

In this Centre, various activities related to the raising of awareness on caring for the environment are performed: **courses, meetings and exchanges of experiences, formative walks, educational programs** directed at the population as a whole (students and adults) and other sensitization and training activities for action towards a sustainable society from the eco-social perspective. Additionally, the Centre provides a hostel service including environmental awareness – supported by living the experience in the facilities and the enjoyment of the surroundings.

For the last 10 years’ communications, have been presented at international congresses and courses to spread the existence of the project, as well as the publishing of articles in newsletters and specialized magazines and active participation in meetings and symposiums related to renewable energies, bioconstruction and environmental education. The **many national and international prizes** confirm the strength of the project.

As Corcerizas is an “energy island” that uses only renewable energy sources such as solar (panels and boilers), hydraulic energy, wind and biomass. **The food served comes from fair trade sources and local organic agriculture**, and the Centre has installations to manage its own waste. Concerning this last aspect, the aim is both to limit the energy consumption in the waste-management as well as reduction and reuse.



photo Brais Palmás



Products –where possible- are bought in bulk and with the least possible packaging, **prioritizing the reusable over the recyclable**. In the Centre itself selective separation of waste is carried out and its conversion into new resources, for instance by composting. This achieves a minimization of generated waste and a saving of energy from the start in the selection of the products until these products are reused and recycled.

In terms of wastewater treatment, the Centre has a revolutionary system known as a Floating Macrophyte Filter (FMF). To this end an artificial wetland is created in which pre-assembled parts are used to keep afloat plants that would normally be rooted in the soil of wetlands so that the roots intertwine with each other, forming a floating island on the surface of the 'wetland'.

These macrophytes pump oxygen from their emerged parts to the submerged roots – to compensate for the difference in hydrostatic pressure between the air and the water – allowing for the development of aerobic decomposing microorganisms (requiring the presence of oxygen). While the sewage water passes through the root-network, the microorganisms decompose the residual elements such as nitrates, phosphates or other floating solids, purifying the water in an entirely natural way.

Thanks to this system the energy expenditure is zero, nor does the FMF produce sludge, bad odors or noise. The only thing necessary is some botanical knowledge to take care of the plants, and the filter can be seamlessly integrated in the landscape. Most importantly, **the filtered water reaches high levels of purification and can be used to water the vegetable garden.**

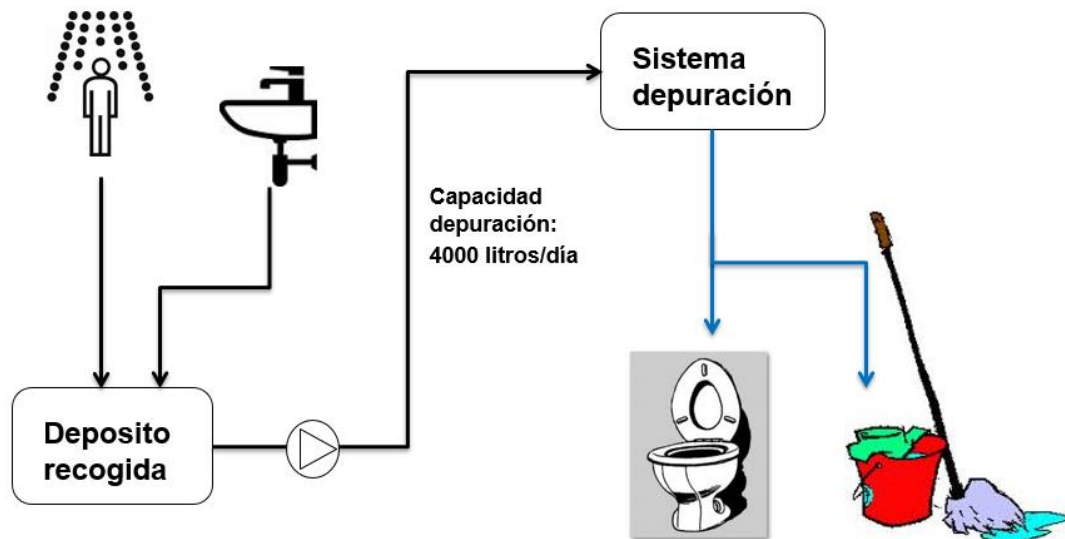
Between this and the other installations used in the Centre, As Corcerizas and Amigos da Terra have successfully demonstrated how to prove the efficiency of bioclimatic architecture and its integration in the surrounds. It has become a benchmark for achieving the

balance between meeting human needs while maintaining the natural environment.

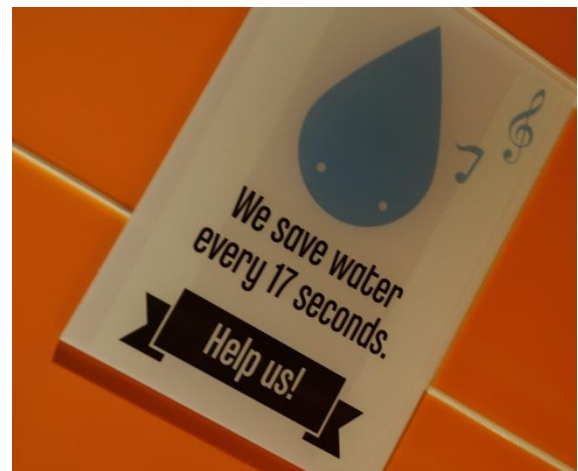


Hostel: Twentytú (Barcelona)

Water Conservation Measures: System for recovering the water from showers and bathrooms for processing it using it subsequently in the WC cisterns. All the taps are fitted with timer mechanisms.



The system allows water discharges to be minimized, as well as the treatment and purification needs associated with discharges. The system is saving -20% compared to the traditional systems.



Waste Management

Pneumatic waste collection

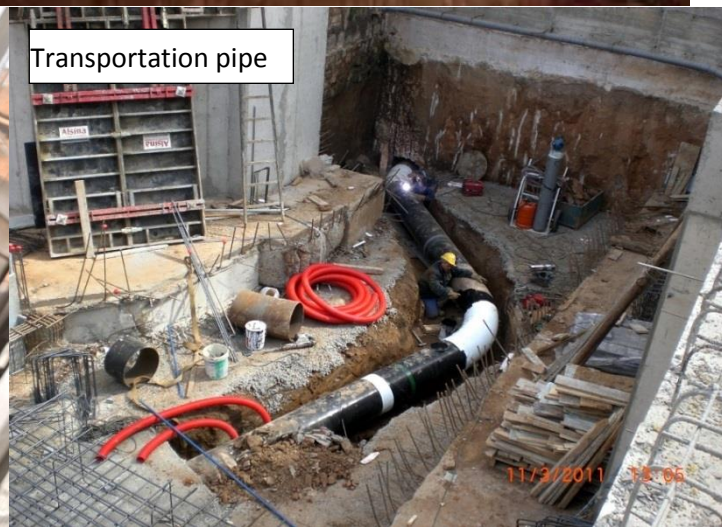
The building is fitted with a selective waste collection system that uses ducts leading to a central reception unit.



Dumping point



Transportation pipe



Collection centre



Technical details

Funding: by the Hostels

Target audience: HI Members/ Guests/ General Public/ Staff/ Differently abled people/ Children/ Families

Reach: National

Duration: Ongoing, daily

Partners involved:

Communication plan: REAJ's website and social media, eNewsletter/ Press releases, etc.

Hostels & NA's satisfaction with the projects: 100%

Participants' satisfaction: 100%

Risks: No risks

What would you change or do differently?

We must keep on working to increase the awareness about the water and waste management. We wish all hostels worldwide got involved with sustainability!

Would like to know more about these initiatives?

Contact: Susana Soto, Department of Communication and Marketing

Email: ssoto@reaj.com

Follow REAJ Spain on

