

## Second Category Camping on the island of Ons

by María J. Maroño Breijo / 2016-06-28 13:15:02 / Espagne / 8551 / ES



Urban reconversion

**Address 1 - street** : Isla de O ISLA DE ONS - BUEU, España

**Population** : 276 hab

**Starting year of the project** : 2014

**Delivery year of the project** : 2015

**Key words** : camping, sustainable, self-sufficient, natural park, renewable energy



0.87 ha



291 242 €

Proposed by :



### ID CARD

**Camping on the island of Ons** born in response to the need to adapt the camping area of the island to the regulations in force in Galicia in tourism, providing it with the necessary services and facilities for campers.

This is a campsite for 200 campers in the **Atlantic Islands National Park - Ons island**.

**The campsite is equipped with catering, cafeteria, locker rooms with showers and washing machines.**

**It's a self-sufficient Camping energetically speaking, a concept that is essential because of its location as there are no connections with basic urban infrastructure except for the GSM telephone coverage.**

Camping de Ons becomes a true example of the concept of **Sustainable Tourism** in Galicia.

### Programme

- Housing
- Public facilities and infrastructure
- Green spaces

- Others

## Project progress

- Delivery phase
- Operational phase

## Procedure type

- Urban développement permit
- 
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## Prescriptions and zoning

- Protected area
- Natural protection area

## Key points

- Quality of life
- Economic development
- Resources
- Biodiversity
- Energy /Climate

## Approaches used

- Others

## Data reliability

Self-declared

## TERRITORY

### Type of territory

**Ons Island** is part of the **Maritime Terrestrial Atlantic Islands National Park** of Galicia. It is located at the entrance of the Ria de Pontevedra, belonging to the municipality of Bueu. Its area is **414 ha** and is one of the natural paradises of the Autonomous Community of Galicia.

Ons Island has been awarded the seal **Starlight**, considered as a tourist destination of interest for stargazing.

Its **marine-terrestrial ecosystem** is **protected** and is home to a large colony of seabirds and seabed rich biodiversity.



Since the National Park of the Atlantic Islands was created, the camping activity has been regulated by the park manager entity, but without having a camping or tourist spot. The last Galician rules on tourist camps forces the actual camping area to be adapted to the requirements imposed on it. Thus the need to equip the area of services of a second category tourist campsite arises.

### Climate zone

[Csb] Coastal Mediterranean - Mild with cool, dry summer.

## KEY FIGURES

### Built surface on natural or agricultural spaces

Built surface on natural or agricultural spaces : 0,04 ha

### Green areas, roofs included

Green areas, roofs included : 2 982 m<sup>2</sup>

### Public spaces area

Public spaces area : 2 090 m<sup>2</sup>

### Commercial floor area

Commercial floor area : 179 m<sup>2</sup>

### Public facilities floor area

Public facilities floor area : 57 m<sup>2</sup>

### Housing floor area

Housing floor area : 26 m<sup>2</sup>

### Number of residential units

Number of residential units : 72

### Green spaces /inhabitant

10.8

### Public spaces/inhabitant

7.57

### Total investment costs (before tax)

Total investment costs (before tax) : 291 242 € HT

## GOVERNANCE

### Project holder

**Name** : TOURIST INITIATIVES ONS, SA

**Type** : Private company

**General description** :

Ons Tourism Initiatives , SA is the winner of the contest public works concession for the construction and operation of a Second Category Camping in Isla de Ons, within the Atlantic Islands Natural Park of Galicia, notified by the Ministry of Environment, Territory and Infrastructure of Galicia. Among other reasons, Ons Tourism Initiatives, is the winner due to its sustainability proposal. Transmitting its main objective in matching the campsite is the maximum respect for the environment and the natural environment of the area . For this, the campsite has renewable energy for both its thermal and electrical needs, and its architecture is done with wooden elements in order to respect the landscape of the area and assume a neutral visual impact.

### Project management

**Description** :

The Xunta de Galicia, which depends on the management of the Atlantic Islands of Galicia National Park, granted under concession of public works construction and operation of Camping de la Isla de Ons.

The winner of such rights rests on Initiatives Turísticas Ons, SA given the sustainable character and total respect for the environment that transmits in its proposal.

### Project stakeholders

Magaral ENGINEERING, SL

Function : Technical consultancy agency

Design and Construction Management Facilities: - Drink Water supply.- treatment of rain and gray water recovery and biologic purification.- Sanitation with DHW thermal solar power supply.- with photovoltaic solar energy.

Manuel García Álvarez - manuelgarcia@magaral.com

Construction21 company page :

<http://www.magaralingenieria.com>

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ZABALLA ARCHITECTURAL AND CARABALLAS

Function : Architecture agency

Project and Construction Management Architecture and Urbanism.

Juan Zaballa Malcorra - zcarquitectura@zcarquitectura.com

Construction21 company page :

<http://www.zcarquitectura.com>

## SOLUTIONS

Company :

## QUALITY OF LIFE

### Quality of life / density

Since the National Park of the Atlantic Islands was created, camping activity was done in a regulated manner by the managing body of the park, but without any tourism camp or camping. The last Galician rules on tourist camps forced the actual camping area to be adapted to the requirements imposed on it. Thus the need to equip the area of services of a **second category tourist campsite** arises.

The need arises to develop the necessary facilities to ensure the proper functioning of a second category campsite in a rustic plot devoid of any service, the main objective is the design of **self - sufficient facilities** both in terms of energy and in the supply drinking water.

The operation of the camping is limited to the summer season and is conditioned mainly to the existence of **maritime passenger transport**, as there is no any settled population on the island throughout the year, except for the watchmen of the park.

### Net density

-0.03

### Culture and heritage

Traditionally on the Isle of Ons free camping has been tolerated in the absence of another place that allowed the overnight visitors to spend the night, except for a few houses admitting guests. Since the creation of the Atlantic Islands National Park of Galicia in July 2002, the camping activity is regulated by the managing body of the park, but it didn't take place in a tourist camp or camping.

However, to continue to provide the camping service to the visitors of the island of Ons, it is necessary to comply with the legislation in force in Galicia in terms of tourist camps, the camping area is adapted to the requirements of the regulations, which justify sufficiently the need to undertake the renovation and improvement of existing facilities for campers service in order to turn them into a tourist camp.

It is important to note that the camping activity on the island of Ons has been held for decades without adverse opinion on its environmental effects from the management body of the National Park and is regulated satisfactorily.

The adequacy of the camping helps maintain one of the most important tourist destinations in Galicia, updating and opening the doors to sustainable tourism.

### Social inclusion and safety

Creation of a total of 72 plots of 40 m<sup>2</sup> for tents, of which 66 are for a maximum of 4 people and 6 for 2 persons, representing a capacity of maximum occupancy of 276 people camping. The total area of camping is less than 75% of the farm.

There are plots accessible to people with reduced mobility or any other limitation. These plots are marked clearly and are located next to the main driveway and toilet blocks.

The campsite has treatment room equipped with a stretcher, first aid and other elements necessary for first aid care.

### Ambient air quality and health

Materials and elected ecosystems warrant certain hygienene conditions, health and environmental protection, so that acceptable sanitation and sealing are achieved in the indoor environment and so that buildings do not cause any damage to their immediate environment, while ensuring proper management of all

types of waste.

## ECONOMIC DEVELOPMENT

### Local development

All measures described help to minimize the use of natural resources, and therefore **lead the development of a business showing great respect for the environment**, crucial issue in a park belonging to the Natura 2000 network National nature.

Thus Ons Island, a site of Community environmental importance considered special protection area for birds, opens the door to **sustainable tourism**.

### % of public spaces

24

### % of commercial area

2

## TRANSPORT

### Mobility strategy

Since the location of this project is an island belonging to a natural park of the Natura 2000 European network, no parking or inland transport services.

The operation of the camping is limited to the summer season and is conditioned mainly to the existence of **maritime passenger transport**. Boats leave from the ports of Bueu and Portonovo and have an almost continuous availability during the time of operation of the park, with book via the web.

## RESOURCES

### Water management

The water supply system is made from two wells expressly for this purpose.

**Faucets and shower heads are timed and low flow**, and can thus reduce the actual water demand up to 40% without affecting the service.

Toilets and urinals will feed from a **gray water recovery system** from showers and sinks.

The site also offers a **rainwater retrieval** system and is used for irrigation of the plot.

### Soil management

All necessary land is cleared, with removal of topsoil and trenching and caissons and accommodation facilities are made.

The pavement of the new trails is rammed earth, with lateral collection of rainwater for storage and reuse.

Camping plots are plotted on the natural ground, except in cases where excessive slope forces to level the floor partially.

The closure of the farm remains in wood and hedges are planted along the perimeter delimiting and enclosing the new facility, reducing the visual impact of the same from the outside.

### Waste management

All water from the campsite sanitation is managed within the plot and for this purpose a fat separator tank is disposed and can be collected and treated by an authorized agent.

In the general collector an equipment that removes solids from sanitation discharges, which will be collected in a container and will be treated as RSU (municipal solid waste in spanish).

The water then continues to a final treatment in a biological treatment plant. Once the water is treated it is finally discharged to the ground through a drainage ditch.

The campsite has **collection and treatment of gray water and rainwater**. Gray water is used for toilets and urinals and rainwater will be used to irrigate the land. Thus the drinking water needs are reduced significantly, which is vital in this case since it is an island nestled in a natural park.

## SOLUTIONS

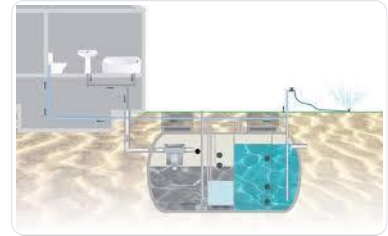
Regenerating station graywater REMOSA GREM 3500

**Description :**

Regenerating gray water station with a capacity of 3,500 l Recovery / day.

Roughing compact system, oxidation, membrane filtration, chlorination and accumulation on a single computer equipment.

- Water management
- Waste management



<http://www.remosa.net>

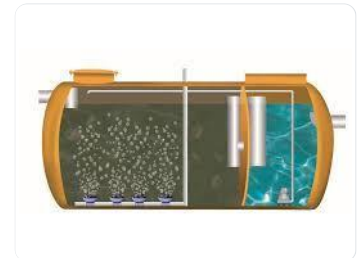
Company :

Purifying ecological REMOSA ROX 300

**Description :**

Industrial water treatment in three stages: roughing, biological oxidation and decanting. Capacidad to 45 m<sup>3</sup> / day.

- Water management
- Waste management



<http://www.remosa.net>

Company :

## BIODIVERSITY

### Biodiversity and natural areas

The need to develop the necessary facilities to ensure the proper functioning of a second category campsite in a rustic plot devoid of any service entails as main objective the design of a **self - sufficient facilities** both in terms of energy and in the supply of drinking water .

The concept of the facility is ultimately performed under the standards of **sustainable construction**, making each and every one of the activities with the greatest possible respect for the environment. Thus they draw to the treatment and use of **gray water** and **rainwater**, **solar thermal** energy for hot water production and **photovoltaic solar** energy for electricity production.

What initially could be considered as primarily a technological and environmental challenge finally becomes a set of virtues as far as sustainable strategies concerns, obtaining an exemplary and respectful camping with the environment, contributing to the protection of the natural environment.

## ENERGY/CLIMATE

### Climate adaptation, resources conservation, GHG emissions

Each camping module is a **wood structure box**, made with slats and boards that give rigidity both parades and floors and ceilings.

The blocks of toilets and facilities do not require isolation, so their facades are self-supporting and slatted wood panels externally coated by vertical wooden slats heat-treated and free of biocides.

Reception modules, cafeteria and cottage have an insulated front with rockwool, like the cover. The windows are also treated wood with double glazing.

As for the interior compartmentalisation in wet areas directly exposed to the action of water, a coating of high density board and Trespa sockets available of stainless steel.

The use of the camping season (June to September) and weather and construction conditions, are so that complex **does not need heating or cooling systems**.

### Energy sobriety

Since the site is located in an area that belongs to the **Starlight** network, light pollution should be minimized.

To this end, and chasing the greatest possible energy savings, **LED type lighting** is used **with presence detection and brightness control** which allows the operation of the equipment to the occupation of spaces.

Outdoor lighting consists beacons with **emission system to the ground** to illuminate traffic areas and access paths to the plots within the campsite.

### Energy mix

DHW heating is done by solar thermal energy.

The production of electricity is achieved with a solar photovoltaic installation.

In order to help achieve the goal of energy self-sufficiency of the camping, kitchen equipment is installed that serves a number of recommendations among which are the following:

- Using gas appliances instead of electrical appliances, as the high power of the same generates large distortions in the power system.
- Appliances that use hot water as washing machines and dishwashers are have hot and cold water intake to reduce the use of electrical resistance.
- In this sense appliances like oven, fryer, kitchen, coffee maker and iron fritop have gas as the main energy supply.
- All refrigeration units are highly efficient so that it can guarantee the service with minimum power consumption.

## Total electricity needs of the project area /year

Total electricity needs of the project area /year : 157,29 kWh

## Total electricity production of the project area /year

Total electricity production of the project area /year : 157,29 kWh

## SOLUTIONS

Solar thermal collector VIESSMANN VITOSOL-T SP2A

### Description :

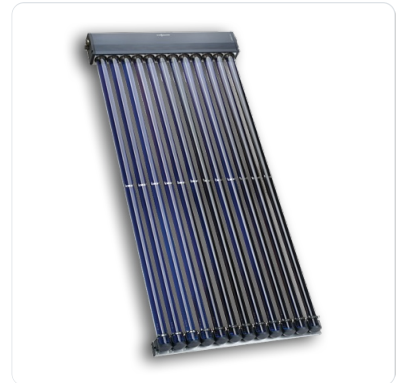
Vacuum tube collector according to the heat pipe principle for placement on flat roof. The Heatpipe technique ensures safe operation. The integrated absorption surface in the vacuum tube gives a constant and high power without fouling.

CO2 Impact : 6,30 tCO2

- Renewable energies

<http://www.viessmann.es>

Company :



Solar photovoltaic collector TAMESOL TM-P66250

### Description :

Polycrystalline solar collector power of 250 Wp.

Robust and corrosion free modules certified for suportar high wind loads.

Excellent performance in low light.

CO2 Impact : 9,70 tCO2

- Renewable energies

<http://www.tamesol.com>

Company :



## BUILDINGS

### Buildings

Each module is a **treated wood** structure camping box, made with slats and boards that give rigidity both parades and floors and ceilings.

The blocks of toilets and facilities do not require isolation, so their facades are self-supporting and slatted wood panels externally coated by vertical wooden slats heat-treated and free of biocides.

Reception, cafeteria and cottage modules have a front façade insulated with rockwool, like the cover. The windows are also treated wood with **double glazing**.

As for the interior compartmentalisation in wet areas directly exposed to the action of water, a coating of high density board and Trespa sockets available stainless steel.

## Contest

### Building candidate in the category





Gran Premio : Ciudad Sostenible

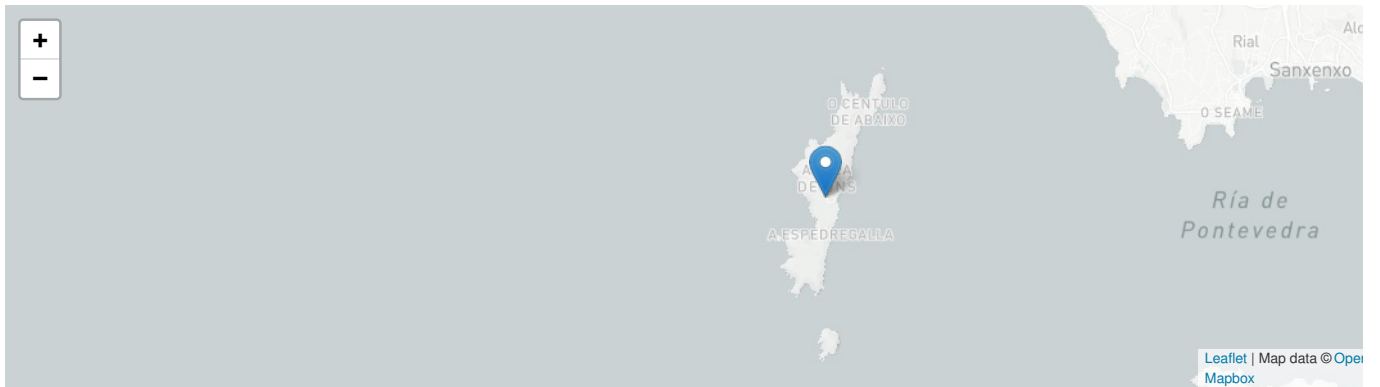


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