

**ENVIRONMENTAL DECLARATION ( Jan - Dec 20 1 6 )**

**VERIFIED ENVIRONMENTAL MANAGEMENT - REGISTRATION "E-IB-000018" - ACCORDING  
TO THE EUROPEAN ECOGESTION AND ECOAUDITMENT REGULATIONS (EMAS)**

VALIDATED ENVIRONMENTAL INFORMATION

REGISTRY E-IB-000018

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## **1.- ENVIRONMENTAL COMMITMENT OF HOTEL BON SOL**

At Hotel Bon Sol we give special importance to personal service and customer service, always trying to satisfy your wishes and make your stay with us as pleasant as possible. Within those desires, respect for the environment is increasingly present, therefore, the Bon Sol hotel expresses its desire and assumes the commitment towards its customers, its collaborators and society in general, to develop its activities improving continuously Respect for the environment, taking this ecological attitude beyond the requirements of current environmental legislation, implementing timely preventive measures and contributing in this way to the sustainable development of their environment.

## **2.- DESCRIPTION OF HOTEL BON SOL**

Hotel Bon Sol is a 4-star superior hotel , framed within the CNAE 5510 code, which has 92 rooms and 180 seats, aimed at a segment of high clientele. Hotel Bon Sol has always been a family business, with a vocation to respect the environment. Since its creation in 1953, it has implanted, within its modest possibilities, the systems that respect the environment as much as possible. As there was no waste collection service or sewage system, the disposal of waste was organized with a rudimentary system.

The food waste was transported every day to a neighboring pig farm (the 'Possessió' of the castle of Bendinat), and glass, metals, cardboard and paper were recycled. Wastewater was treated in a rudimentary water treatment plant and used to irrigate. Wastewater was never discharged into the sea. For heating and hot water almond shell boilers were used, which is a renewable energy.

Hotel Bon Sol is located in the southwest of the island of Mallorca in the residential area of the municipality of Illetas. The hotel facility is located on a hill next to the coast, adapting its construction perfectly to the topography of the land.

Geographical coordinates:

39 ° 32'26.0 "N

2 ° 35'33.3 "E

The hotel has 92 rooms with bathroom, terrace, heating / air conditioning, minibar, safe, telephone, television and radio. In the main building there is a restaurant, a covered garden for breakfasts and spacious lounges. The establishment consists of the services of swimming pool, tennis court, mini-golf, gym, spa, physiotherapy and a playground, in addition to a conference room to hold work meetings and seminars. The Hotel remains closed from 05/11 to 10/02

Since March 2003, the establishment has the distinctive "Q" of quality, awarded by the Spanish Institute for Tourism Quality (ICTE)

### **3.- IMPLEMENTATION OF THE ENVIRONMENTAL MANAGEMENT SYSTEM**

Following the line of measures to achieve a hotel that respects the environment, at the end of 1998 the Hotel Bon Sol began the process of implementing an Environmental Management System (EMS) in accordance with EEC Regulation 1836/93 "Community System of Ecogestión and Ecoauditoría "(EMAS). During the year 2001 EMAS II came into force (EEC Regulation 76/2001 and replaced the 1836/1993 and the organization was audited and verified according to EM AS II.

Regulation 1221/2009 (EMAS III) is currently in force, and the Hotel has been audited and verified under it.

The Environmental Management System (EMS) is a voluntary instrument that allows Hotel Bon Sol to manage its environmental behavior based on three fundamental pillars: compliance with environmental regulations, continuous improvement and the involvement of all interested parties (workers, customers , public administration...).

The phases and elements of the Environmental Management System are documented in the hotel's GHS Manual, which serves as a permanent reference to the company's personnel for the planning, implementation and maintenance of the GHS. Likewise, the Manual indicates other key documents (procedures and records) that inform more in detail about the elements of the SGA in the hotel. Through annual internal audits, the hotel controls the application of the Environmental Policy and the effectiveness of the Environmental Management System.

The Director of Hotel Bon Sol is the head of the Environmental Management System. For an adequate development of the Environmental Policy, the director appoints a representative of the Directorate in the field of environment, being this the Responsible for the Environment and relying on the Environment Committee.

The adequate training and awareness on environmental issues of all personnel is basic in the process of implementation and maintenance of the Environmental Management System.

It is frequent the attendance of the directive team to seminars and days, to update itself on the advances in measures of energetic saving, as well as to exchange ideas and points of view with other companions of the environmental field.

During 2016 the following talk was made

<b>Conference / Contents</b>	<b>Addressed to</b>	<b>Date</b>	<b>Imparted by</b>
<i>Good environmental practices</i>	<i>All the departments</i>	<i>Sept. 16</i>	<i>Get21</i>
<i>Drilling dangerous spill</i>	<i>All the departments</i>	<i>Oct.16</i>	<i>Get21</i>

The environmental training plan is integrated into the general training plan of the Bonsol Hotel, which also includes training actions for the different aspects of the Hotel (quality, occupational risks, languages, etc.). In addition, regarding these actions, we proceed to conduct value surveys to the attendees, in such a way that we obtain valuable information to detect the environmental concerns of our staff, and thus be able to improve the actions that are undertaken.

#### **4.- ENVIRONMENTAL POLICY OF HOTEL BON SOL**

To carry out an active dissemination of the environmental commitment, the Environmental Policy of the Hotel Bonsol has been sent to suppliers and subcontractors and is available to clients at the Hotel Reception. Likewise, it is available, along with this statement, on our website [www.hotelbonsol.es](http://www.hotelbonsol.es)

All new staff members receive a welcome manual explaining our environmental concerns and good practice guides.

Policy text

*" The hotel Bon Sol expresses its desire and assumes the commitment towards its customers, its collaborators and society in general to develop its activities continuously improving the respect for the environment, taking this ecological attitude beyond the demands of the current environmental legislation, implementing the appropriate preventive measures and contributing in this way to the sustainable development of their environment.*

*To this end, it will act on the basis of the following environmental principles:*

*Taking the measures of action, control and correction necessary to prevent and progressively reduce the impact of the company's activities on the environment.*

*In accordance with the principle of continuous improvement, go beyond strict compliance with current legal regulations on environmental matters.*

*Promote the training and environmental information of those people involved in the management and operation of the Bonsol hotel facilities, linking appropriate programs so that respect for the environment is an essential element in the development of the company's activities.*

*Apply as much as possible, the technical improvements available to minimize emissions and pollutant discharges, ensure proper management of waste, reduce the consumption of energy, water, materials and hazardous substances.*

*Encourage internal and external environmental communication with transparency criteria, inform clients of the environmental protection measures taken and how they can collaborate.*

*Inform suppliers and subcontractors of the environmental criteria required by the Bonsol hotel, and incorporate environmental criteria in the products consumed.*

*Communicate our policy to those who work on behalf of Hotel Bonsol.*

*Measure, review and correct compliance with environmental principles of the company to prevent accidents likely to affect the environment and thus ensure environmental protection as an improvement tool and as a strategic development factor.*

*Collaborate with public authorities in the establishment of emergency procedures in the case of accidents that affect the environment.*

*The Bonsol hotel management undertakes to review this policy annually for its update.*

May 2007 "

## **5.- BONSOL HOTEL ORGANIZATION CHART**

The General Director, Mr. Martin Xamena Toro, as the maximum responsible for the management and maintenance of the EMS, of the ega in Mr. Alejo Truyols , as Head of Environment and Quality, the representation of the Directorate in environmental matters.

The Environmental Committee, in turn, is completed with the following people:

Ms. Lorraine Xamena ( Attached Address )

Mr. Alejandro Xamena ( Commercial Management )

## 6.- ENVIRONMENTAL OBJECTIVES AND GOALS

### 6.1. Objectives established for the year 2016

The Environmental Program describes the objectives and goals set by the Hotel Bon Sol, indicating those responsible for its execution and the expected date of compliance as well as an estimate of the economic cost.

The Bon Sol Hotel conducts a four-month follow-up of the Environmental Program to assess the degree of achievement of objectives and goals. By the year 2016 the hotel had set the following objectives.

OBJECTIVES / GOALS
A. Reduction of water consumption by 5%
B. Reduction of electricity consumption by 2%
C. Improve environmental communication
D. Reduce the carbon footprint by 2000 tn CO2 per year

For this, it had planned to carry out the following actions:

ACTIONS	
1. Reduction of the wash cycle of yellow towels (objectives A and B)	
TERM / RESPONSIBLE / COST	June 2016 / Novaquimica / free
2. Introduce energy saving information sheets in customer rooms (objective C)	
TERM / RESPONSIBLE / COST	April 2016 / Governor / 1 euro unit
3. Introduce the environmental guidelines of the Hotel in the welcome books to reach the clients (objective C)	
TERM / RESPONSIBLE / COST	April 2016 / Address / 2 euros unit
Four. Purchase land for planting trees (objective D)	
TERM / RESPONSIBLE / COST	November 2016 / Xamena Family / ND

### 6.2.- Valuation of the log of the goals of the year 2016

Next, the achievement of the objectives and actions that were marked are valued

#### Objective A.

We have had an increase in consumption per water stay. We believe that the type of clients we are having during the summer months (more families and children) have led to a general increase in consumption.

**Objective B.**

The marked objective has been achieved (a 5.93% reduction).

**Objective C.**

During 2016 it was not possible to carry out the planned action, but it is included in the 2017 program

**Objective D.**

Objective not met, due to economic reasons that have prevented its realization.

Regarding the associated actions, the 1. and 2. have been carried out effectively, not having been possible to perform actions 3. and 4.

**6.2. Objectives and goals established for the year 2017**

<b>OBJECTIVES / GOALS</b>
<b>A.</b> Reduction of water consumption by 5%
<b>B.</b> Reduction of chemical consumption in laundry by 3%
<b>C.</b> Improve environmental communication (NC)

<b>ACTIONS</b>	
<b>1.</b> Reduction of the cost of yellow towel washes by means of a system that limits the use of the towels by the clients (objective A and B)	
<b>TERM / RESPONSIBLE / COST</b>	May 2017 / Address / no cost
<b>2.</b> Decrease the percentage of rejection in laundry using more efficient chemicals (objective A and B)	
<b>TERM / RESPONSIBLE / COST</b>	April 2017 / CHP / no added cost
<b>3.</b> Introduce the environmental guidelines of the Hotel in the welcome books to reach the clients (objective C)	
<b>TERM / RESPONSIBLE / COST</b>	November 2017 / Address / 2 euros unit
<b>4.</b> Introduce in the satisfaction questionnaires, environmental assessment (objective C)	
<b>TERM / RESPONSIBLE / COST</b>	November 2017 / Address / 0.9 euros unit

## 7.- ENVIRONMENTAL ASPECTS

Hotel Bon Sol identifies the environmental aspects that derive from the hotel's activities and services and over which it has influence. The environmental aspects are evaluated under normal, abnormal operating conditions, incidents and possible emergency situations to determine if their impact on the environment is significant.

Each department receives a copy of its environmental aspects, for more information.

### 7.1. Valuation criteria

To assess the aspects, each of them has been assessed according to the following criteria :

C1	Toxicity
C2	Half Receiver
C3	Frequency
C4	Legislation
C5	Magnitude
C6	Opportunity for improvement

Each one has a scale that ranges from 1 to 20 and its significance is given by the following formula

**Significance:  $C1 + C2 + C3 + C4 + C5 + C6 \geq 50$  is significant**

In addition, we consider the following points:

- If a criterion indicates N / A, the aspect score is multiplied by the coefficient 1.50.
- The worst possibility of each environmental aspect will be evaluated; In case of doubt, the highest score will be applied
- All emergencies are considered significant, and the appearance of species affectation is considered significant.



Below are the environmental aspects evaluated that have been significant, both direct (D) and indirect (I)

<b>Activity</b>	<b>Environmental aspect</b>	<b>Cond. USE</b>	<b>DIR. / INDIREC.</b>	<b>SIGNIF.</b>
Provision of the Accommodation and Restoration Service	ELECTRICITY CONSUMPTION	N	D	YES
External laundry	I USE DANGEROUS PRODUCTS	N	I	YES
Firefighting	EMISSIONS OF FIRE EXTINGUISHING GASES	AND	D	YES
Firefighting	GENERATION OF RESIDUAL WATERS CONTAMINATED	AND	D	YES
Transport, storage and handling of hazardous substances	SPILED HAZARDOUS PRODUCTS	AND	D	YES
Transport, storage and handling of hazardous substances external companies	SPILED HAZARDOUS PRODUCTS	AND	I	YES

The environmental impact of each aspect:

	<b>Environmental impact</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
ELECTRICITY CONSUMPTION	X					
I USE DANGEROUS PRODUCTS		x	x		x	
EMISSIONS OF GASES OF EXTINCTION OF FIRES	X					
GENERATION OF RESIDUAL WATERS CONTAMINATED		X				
SPILED HAZARDOUS PRODUCTS		x		x		

Environmental impacts:

1. Atmospheric emissions
3. Waste management

2. Water pollution
4. Soil pollution

5. Exhaustion of natural resources  
impact

6. Local issues: vibration, noise,  
visual

### 7.2. Energy consumption

In the following table, the main services that the hotel offers and that suppose an energy consumption are detailed:

<b>Service</b>	<b>Characteristic</b>
<i>Heating common areas</i>	<i>Fan Coils</i>
<i>Heating rooms</i>	<i>Fan Coils</i>
<i>Air conditioning common areas</i>	<i>Fan Coils</i>
<i>Air conditioning rooms</i>	<i>Fan Coils</i>
<i>Domestic hot water</i>	<i>Centralized, gas boilers</i>
<i>Outdoor pool</i>	<i>Heated with heat recovery, solar energy and cogeneration</i>

Next, the following table shows the list of energy sources available to the establishment to cover the demand associated with the uses detailed above:

<b>Source</b>	<b>characteristics</b>	<b>Applications</b>
<i>Electricity</i>	<i>Three-phase 380/220 V</i>	<i>Air conditioning, pumping water, lighting, cold rooms, office automation, ... etc.</i>
<i>Natural gas</i>	<i>Channeled</i>	<i>Hot water, heating, kitchen and laundry</i>
<i>Gasoil</i>	<i>1 deposit of 2,000 l (secondary use)</i>	<i>Emergency</i>
<i>Solar energy</i>	<i>58 m2</i>	<i>Outdoor pool - ACS</i>
<i>Heat recovery</i>		<i>Outdoor pool - ACS</i>

The following table details the average energy consumption of our establishment:

<b>Power source</b>	<b>kWh per stay 2012</b>	<b>kWh per stay 2013</b>	<b>kWh per stay 2014</b>	<b>kWh per stay 2015</b>	<b>kWh per stay 2016</b>
<b>Electricity</b>	24.42	22.77	22.23	21.26	20.00
<i>Annual variation</i>	-11.85%	-6.73%	-2.39%	-4.35%	- 5.93 %
<b>Natural gas (kitchen and laundry)</b>	10.52	12.53	10.40	11.31	11.59
<i>Annual variation</i>	-10.30%	19.12%	-17.02%	8.75%	2.51 %
<b>Natural gas (boiler room)</b>	19.69	17,32	17,04	15.77	16.04
<i>Annual variation</i>	-6.81%	-12.03%	-1.63%	-7.41%	1.66%

*Source: Internal records of tracking and billing of utility receipts*

*Stay: person is understood per day*

Then we went to evaluate the results obtained in 2016

### **Electric consumption**

In absolute terms we have had a higher consumption , of the order of 10 %. However, the ratio per stay has decreased, leaving evidence of the large variable component of electricity consumption.

### **Gas Consumption**

The increase in both consumption has been slight, there being no other cause that has not motivated

### **7.3. Renewable energy**

Solar energy is used for the production of sanitary hot water and the heating of the pool. The first solar panels were installed in 1968 with the 'Tec-Sol' system, in 1985 they were replaced by new panels and in 2001 by more efficient panels.

We currently have 23 solar panels, forming a useful area of approx. 58 m<sup>2</sup>,. with an approximate power 2Kw h / plate.

It is estimated that approximately our plates produce useful energy annually 40.050 KWh (calcu l or energy through the f-chart method)

It allows us to reduce the consumption of another type of non-renewable energy.

Thanks to the use of the heat from the refrigeration of the cold rooms and freezer to heat the pool, it has been possible to derive the solar energy for its greater use in ACS

#### 7.4 . Energy savings

All the roofs and exterior walls of the hotel are insulated with double partition and polystyrene insulation or rock wool.

Most of the windows have double *glazing* of the *climalit* type , and in the last refurbished rooms the ' *climalit* ' and ' *heat mirror*' glass system has been used , which blocks infrared radiation by 80% and ultraviolet radiation by 98% .

We have low consumption bulbs in large part our establishment. Only incandescence is used in night table lamps.

It has been planned to change successively the remaining incandescent lamps, besides going to include the led technology

All rooms have a general shutdown switch.

To optimize the control over energy consumption, a software program for management and control of energy and hotel machinery was installed in June 2000.

In December 2002, an energy audit was conducted for a total optimization of energy resources.

At the end of 2003, the air conditioners of the rooms were connected to the ROBOT home automation system. This will be used during the summer to automatically disconnect part of the AA generators during the hours in which, normally, the clients are not in the rooms, and to keep the water from the air at a cooler temperature, allowing only, achieve a temperature that we call "stand-by"

During 2004, the boiler room was completely remodeled, piped gas and two new gas boilers were installed, covering 90% of the demand.

In 2006 , we acquired a thermal blanket that we placed in the heated pool during the night, thus allowing significant energy savings.

We have canceled the electrical resistances that heated the water of the washing machines, and we have placed gas boilers that supply the water already hot to them. We reach the desired temperature with less energy resources.

Lights with motion sensors have been placed in the toilets of the bar.

We stop the air conditioning system in rooms when the hotel's clients are in the restaurant, not affecting the quality of the client.

In 2011, a domotic module was installed that regulates the peaks of electrical consumption by making controlled stops of the air conditioning compressors, maintaining the comfort of the customers.

The TVs in the rooms have been replaced by LED screens with lower power consumption

### 7.5 . Emissions to the atmosphere

The emissions to the atmosphere are mainly produced by the operation of the boilers that produce emissions of carbon dioxide and monoxide and oxides of nitrogen. Every day the personnel of the Maintenance Department controls the operation and the temperature of the boilers. The preventive program, recently revised, guarantees the good functioning of all our facilities, and warns us of possible deficiencies that may negatively affect our environment and our customers.

We perform combustion analysis of the boilers (following the RITE instructions) that are in use (3 and 4 gas). An analysis dated June 2016 is exposed

<b>Limits</b>			
<b>Fuel type</b>		<b>Gas</b>	
<b>Boiler identifier</b>		<b># 3</b>	<b>No. 4</b>
<b>Analysis date</b>		<b>June 2016</b>	
<b>CO2%</b>		9.0	8, 8
<b>O2%</b>		5, 0	5, 2
<b>CO %</b>	500	0	6
<b>NOx ppm</b>		26	4
<b>NO2 mg / m3</b>		26	4
<b>Performance %</b>		96.7	96.7
<b>Opacity</b>		-	-

Source: VALDECO (Valencia na combustion) with RI 46/51501

To estimate the measurements of Kg. Of CO2 emitted into the atmosphere by our energy sources, we refer to the guide published each year by the Conselleria de Medioambiente.

<b>Power source</b>	<b>CO2 emission</b>
<i>Electricity</i>	0,7655 Kg. Per kWh
<i>Fuel vehicles</i>	3.18 0 Kg. Per Kg.
<i>Natural gas</i>	56 Kg. By Gj

With all this, the ratios calculated based on the energy consumptions in previous detailed tables, give you the following data

<b>Power source</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Electricity</b>	638,081	658,293	587,407	633,336	629,876
<b>Natural gas (kitchen and laundry)</b>	70,911	84,701	70,283	86,163	96,155
<b>Natural gas (boiler room)</b>	132,702	117,054	115,149	120,186	133,021
<b>Fuel vehicles</b>	7,455	11,064	11,569	7,004	5,133
<b>TOTAL</b>	<b>849,149 Kg.</b>	<b>871,112 Kg.</b>	<b>784.408 Kg.</b>	<b>846.689 Kg.</b>	<b>864.185 Kg.</b>

The establishment compensates the emissions of tons of CO2 from its direct activity, plus the CO2 from the flights of its customers, through 120 hectares of plantations.

The following table shows the CO2 ratio per kWh

<b>Indicator</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Kg. Co2 per kWh</b>	0.46	0.49	0.46	0.46	0.44
<b>variation</b>	-6.87%	6.13%	-4.61%	-0.45%	-4.39%

Regarding possible refrigerant gas leaks, our preventive plan helps to minimize such risk. The temperatures are controlled daily and the equipment is periodically checked by a company that has the necessary equipment to recover gases and take them to a plant for their safe destruction.

For a better control of the situation, possible gas charges are recorded and equipment has been inventoried with the type of gas used. Below we show the updated inventory :

Next, we reflect the gas charges distributed by type, expressed in Kg.



<b>Electricity</b>	822,829		1,0496 0	1,7273 0	0,0404 0	863,641. 3	1,421,27 2	33,242. 3
<b>Gas (Kitchen + Laundry)</b>	476,961	1,717.0 6	0.0000 0	38,000 0	0.2000 0	0.0	65,248.3	343.4
<b>Gas (Boiler Room)</b>	659,826	2,375.3 7	0.0000 0	38,000 0	0.2000 0	0.0	90,264.2	475.1
<b>Fuel (kg)</b>	1.614		0.0150 0	8.7300 0	0,0300 0	24.2	14,092.2	48.4
<b>TOTAL</b>	1,961,230					863,665. 5	1,590,87 7	34.109. 2
					<b>Total Kg</b>	<b>863.67</b>	<b>1,590.88</b>	<b>34.11</b>

### 7.6 . Consumption and spillage of water

The hotel consumes water from the municipal supply network. Several controls are carried out on the consumption of water and its quality in different points of the hotel and the kitchen (drinking water). Part of the water goes through a process of osmosis to be consumed at points where the purity of water is of great importance (coffee makers, car wash ... etc). Employees are also urged to apply water saving measures. The wastewater from the hotel is similar to domestic waste and is discharged into the sewer system.

We want to maintain a systematic control to maintain optimal water quality, as reflected in the following table:

<b>Control</b>	<b>Periodicity</b>	<b>Responsible</b>
<i>Water consumption</i>	<i>Daily</i>	<i>Maintenance</i>
<i>Water quality in consumption points</i>	<i>Daily (1)</i>	<i>Maintenance</i>
	<i>Monthly</i>	<i>Bio-vet</i>



<i>Network water quality (point farthest from the network)</i>	<i>Daily</i>	<i>Maintenance</i>
<i>Water quality osmosis</i>	<i>Monthly</i>	<i>Bio-Vet</i>
<i>Legionella control</i>	<i>Monthly</i>	<i>Bio-vet</i>
<i>Quality sewage</i>	<i>Annual</i>	<i>Bio-vet</i>

(1) *All consumption points are analyzed in a rotating way*

Table of water consumption:

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>m3 stay</b>	0.40	0.42	0.31	0.34	0,43
<b>Annual variation</b>		4.35%	(*)	(*)	24.12%

*Source of water consumption : daily reading of the meter*

*(\*) Data lower than the actual consumption due to breakage of the water meter*

After 2 years with problems in the meters, and with no valid readings for it, we have returned to more usual values, being able to take this consumption again as a future reference.

Faecal wastewater goes directly to the sewer system, and from there to Depuración, not pouring any product that could be toxic or corrosive for sewage network manipulators and for purification installations.

Currently there is no ordinance in the municipality of Calvià that regulates the parameters of the sewage discharge. The ones established in the Balearic Hydrological Plan are taken

The latest analyzes carried out by Biovet showed the following results:

	<b>Analysis date</b>	<b>DBO5</b>	<b>COD</b>	<b>Solids</b>	<b>pH</b>	<b>Fat</b>	<b>Non-biodegradable detergents</b>	<b>Conductivity</b>
<b>Fecal (garage)</b>	10/10/2016	520 mg / l O2	1818 mg / l O2	86 mg / l	9,5	62 mg / l	0,232	865 uS / cm

<b>Fecal (laundry)</b>		130 mg / l O2	421 mg / l O2	156 mg / l	7.19	<10 mg / l	0, 139	911 uS / cm
<b>Max Level</b>		750 mg / l O2	1500 mg / l O2	750 mg / l	6 - 9	150 mg / l	10 mg / l	-

*In red the values that exceed the reference limits (Hydrological Plan of the Balearic Islands)*

The value out of range has been a reason for opening a non-conformity, which has been closed after the instance of the water company not to act on it, since it is not a value of special significance.

### **7.7. Saving water**

In the kitchen, pressurized water is used both to rinse the utensils and to clean the surfaces, in order to reduce water consumption.

The areas of showers and changing rooms have the system of water saving in the "artichokes"

The irrigation of the green zones is carried out during the night, in the hours of less evaporation of the water.

The urinals of the toilets of the bar, have installed a system of discharge by sensor of movement .

We have installed a Spectank system for cleaning pots, which allows a saving of water and detergent.

The toilets in the rooms have saving aerators.

### **7. 8. Waste management**

As a result of the hotel activity, different types of waste are generated and collected selectively. The banal waste, batteries, glass, paper and cardboard, containers with the green dot are deposited in separate containers and delivered to the municipal collection service Calvià 2000. All the aerosols we use have the green dot, so they are managed by two for Calvià 2000 as a container . Fluorescent, used vegetable oil, ink cartridges (fax and printers) are delivered to authorized managers for proper treatment. The packaging of the products that may contain traces of dangerous substances are returned to the companies supplying these products.

We dedicate part of the effort to control that the waste that other companies (subcontractors) generate as a result of their activity in our hotel, are properly managed.

If other waste is generated, the Environmental Manager is responsible for calling the most appropriate manager for its withdrawal.

We separate the organic material for selective collection by Calvia 2000.

This table describes the companies with which Hotel Bonsol currently manages each of the main waste:

<b>Type of waste</b>	<b>Authorized manager</b>
<b>Banal waste</b>	<i>Calvià 2000</i>
<b>Paper and paperboard</b>	<i>Calvià 2000</i>
<b>Glass</b>	<i>Calvià 2000</i>
<b>Used vegetable oil</b>	<i>ENVIRONMENTAL ACTIONS EUROPE (*)</i>
<b>Batteries</b>	<i>Adalmo</i>
<b>Fluorescents and mercury lamps</b>	<i>Adalmo</i>
<b>Toners and ink cartridges</b>	<i>Tonnerclass</i>
<b>Electronic waste</b>	<i>Adalmo</i>
<b>Containers Green Point</b>	<i>Calvià 2000</i>
<b>Containers with remains of chemical products</b>	<i>Recovered by their respective suppliers</i>
<b>Debris</b>	<i>MAC Insular</i>
<b>Containers with remains of chemical products not collected by suppliers</b>	<i>Adalmo</i>

(\*) Act as transport company (NIMA 0700008084), being the final destination the company Biocom Energía, for the production of biodiesel, located in Valencia (waste manager NIMA 4699999999)

The amounts of waste generated annually are reflected below

<b>Type of waste</b>	<b>Datatype</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Organic</b>	<i>Dear</i>	336	360	324	534	490
<b>Annual variation</b>	<i>No. cont.</i>	52.24%	7.14%	-10.00%	64.81%	-8.24 %

<b>Type of waste</b>	<b>Datatype</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Paper and cardboard <sup>(1)</sup></b>	<i>Dear</i>	6.700	6,850	6,950	8.050	9.250
<b>Annual variation</b>	<i>Kg.</i>	-6.29%	2.24%	1.46%	15.83%	14.91 %
<b>Glass <sup>(2)</sup></b>	<i>Dear</i>	10.750	11.750	7,750	10,250	10. 50 0
<b>Annual variation</b>	<i>Kg.</i>	43.33%	9.30%	- 34.04%	32.26%	2.44 %
<b>Containers</b>	<i>Dear</i>	2,250	1.980	1,710	3,240	2.610
<b>Annual variation</b>	<i>Kg.</i>	56.25%	- 12.00%	- 13.64%	89.47%	-19.44 %
<b>Used vegetable oil</b>	<i>Real</i>	1,720	1,520	1.350	980	1.050
<b>Annual variation</b>	<i>Liters</i>	- 15.69%	- 11.63%	- 11.15%	- 27.41%	7.14 %
<b>Fluorescents</b>	<i>Real</i>	0.048	0.038	0.016	0.033	0.0 5 3
<b>Annual variation</b>	<i>Tn.</i>	93.25%	- 21.66%	-57%	106.25%	60.61 %
<b>Toners and ink cartridges</b>	<i>Real</i>	<i>fifteen</i>	14.55	<i>twenty</i>	10	1 5
<b>Annual variation</b>	<i>Kg</i>	114.29%	-3.00%	37.46%	- 50.00%	50.00%
<b>Electronic waste</b>	<i>Real</i>	-	0.025	0.014	0.00	0.0 0
<b>Annual variation</b>	<i>Tn.</i>	-		-44%	-	-
<b>Lead batteries</b>	<i>Real</i>	0	0	0	0	0
<b>Annual variation</b>	<i>Unit</i>					
<b>Batteries</b>	<i>Real</i>	0.014	0.019	0.023	0.030	0, 39 0
<b>Annual variation</b>	<i>Tn.</i>	13.08%	31.29%	19.17%	30.43%	30.00 %
<b>Dangerous</b>	<i>Real</i>	0,115	0.191	0.270	0, 110	0, 0475

<b>Type of waste</b>	<b>Datatype</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>packaging</b>	<i>Tn.</i>					
<b>Annual variation</b>		28.70%	66.09%	41.36%	- 59.25 %	- 59.81 %
<b>Debris</b>	<i>Real Tn.</i>				39	3 26.48
<b>Annual variation</b>						737.13%
<b>Asbestos (4)</b>	<i>Real Tn.</i>				2.64	0.44
<b>Annual variation</b>						-83.33%

Source: Internal records of tracking and billing of utility receipts

- (1) A cardboard bullet is 50 Kg.
- (2) A full glass container is approx. 1,000 Kg.
- (3) A yellow container is approx. 90 Kg
- (4) The collection of Asbestos was punctual (material in disuse)

### **7.9. Consumption of products and substances**

In the hotel, very varied products and substances are used daily, some of which are considered dangerous, since they are likely to cause damage to health or the environment. Employees who handle hazardous substances know and have at their disposal the safety cards of the corresponding products, which are constantly updated by the Environmental Manager.

The hotel continues working in the line of reducing or replacing certain products. For example, paper is reused to the maximum (obsolete menu sheets, brochures, photocopies on one side, etc.). Detergent dispensers have been installed in washing machines and dishwashers to optimize the consumption of these products. The products have been replaced in aerosols by others of the same quality in sprayers.

We use "household" cleaning products in order to avoid more dangerous components in some products.

Some product comes in concentrated doses for its dissolution and thus reduce packaging.

The consumption data can be consulted in Annex 1 "Table of Basic Indicators"

#### **7.10. Interior and exterior noise**

In 2001, noise measurements were made outside the hotel and in different parts of the interior (reception, cafeteria, rooms, kitchen, commissary, laundry, boiler room).

In spite of complying with the current ordinance, during 2009 improvements were made to the bar, isolating the tech or with the purpose of reducing the noise levels, and improving the quality of the customers in the rooms located above.

During 2015 we have made a new measurement of sound, in order to ensure compliance with the changes made in the municipal ordinance in this regard.

Reading place		Daytime reading 8 - 20 hrs	Evening reading 20 - 24 hrs	Night reading 24 - 8 hrs	Maximum Day	Maximum evening	Maximum Night
Interior room	2. 3. 4	<30	<30	<30	35	35	30
Noble zone interior	library	39.6	42	<30	Four. Five	Four. Five	Four. Five
Exterior terrace Bar		31.8	53.8	<30	60	60	fifty
Exterior front door		32.5	41.2	<30	60	60	fifty
Exterior in front of garage		39.2	37.8	<30	60	60	fifty
Interior of the Bar, 1m. of the musical performance		64.2			65		

Sound level meter used: Dr. Meter MS10 (1507308)

Units in dB, and reference values according to the Municipal Ordinance of Calvia

### **7.11 . Incidents, accidents and emergency situations**

The hotel has an "Emergency Plan" that is known to all staff and put into practice in annual drills , having taken place on 05/28/2015, with a satisfactory result.

Complying with Decree 8/2004 of January 23, Hotel BonSol has registered the Self-Protection Plan (RGPA-035-06)

The hotel has also developed specific instructions for the case of fire, gas leakage and accidental spillage of dangerous substances that provide for notification to the competent authorities in case of an emergency situation.

### **7.12 . Environmental behavior according to new legal requirements**

The establishment is adapting to the legislative changes that are taking place, trying to minimize processing periods, so that compliance is as fast as possible.

To date, none of the new requirements has implied any change in our environmental behavior.

**Annex 1 : Basic indicators table**

The following table shows the basic indicators with the data for the year 2016

			<i>Stays</i>	<i>Average work</i>
			41,143	71
<b>BASIC INDICATORS</b>		<b>Cons TOTAL</b>	<b>Ratio / stay</b>	<b>Ratio / worker</b>
<b>Energy efficiency</b>				
TOTAL Energy Consumption	MWh	1,979,794	<b>0.048</b>	<b>27,884</b>
TOTAL Renewable Consumption		4,050	<b>0,000</b>	<b>0.057</b>
<b>Material consumption efficiency</b>				
Paper consumption	ton	0,741	<b>0,000</b>	<b>0.011</b>
<b>Water</b>				
TOTAL water consumption	m3	17,522	<b>0.426</b>	<b>246,789</b>
<b>Waste</b>				
TOTAL annual waste	ton	399.91	<b>0.010</b>	<b>5,633</b>
TOTAL annual resid. DANGEROUS		0,580	<b>0,000</b>	<b>0.008</b>
<b>Biodiversity</b>				
Land occupation	m2	5,700,000	<b>0.139</b>	<b>80,282</b>
<b>GHG emissions</b>				
CO2 electricity	ton	629,876	<b>0.015</b>	<b>8,871</b>
CO2 Gas		229,176	<b>0.006</b>	<b>3,228</b>
CO2 Fuel vehicles		5,133	<b>0,000</b>	<b>0.072</b>
<b>CO2 TOTAL</b>		<b>864,185</b>	<b>0.021</b>	<b>12,172</b>
<b>Total annual emissions</b>				
SO2	kg	863,666	<b>0.021</b>	<b>12,164</b>

Nox		1,590,877	0.039	22,407
P.M		34,109	0.001	0.480
<b>TOTAL</b>		<b>2,488,652</b>	<b>0.060</b>	<b>35,051</b>
<b>Gas refrigeration EI</b>				
CO2	ton	121,600	0.003	1,713
<b>Consumption of chemical products</b>				
<b>LAUNDRY</b>				
Totals	ton	14,400	0,000	0.203
<b>POOL</b>				
Antialgas	ton	0.080	0,000	0.001
Hypochlorite		0.444	0,000	0.006
Bromine		0.340	0,000	0.005
pH -		0.010	0,000	0,000
pH +		5,557	0,000	0.0 03
<b>BEDROOMS</b>				
Ammonia	ton	0,573	0,000	0.008
Glass cleaner		0,348	0,000	0.005
Antical		0.180	0,000	0.003
Degreaser		0.130	0,000	0.002
Bathroom Cleaner		0,225	0,000	0.003
Clean floors		0.420	0,000	0.006
Dishwasher		0.218	0,000	0.003
Spray for mop		0.180	0,000	0.003
Furniture spray		0.152	0,000	0.002
Salfumant		0.256	0,000	0.004
Carpet cleaner		0.004	0,000	0,000
Chlorinated cleaner		0.340	0,000	0.005
Bleach		0.093	0,000	0.001
<b>ANNUAL EXPENSES CHEMICALS</b>			<b>18,650</b>	<b>0,000</b>



### **Conversion factors applied**

#### **Emissions to the atmosphere**

<http://www.caib.es/sacmicrofront/archivopub.do?ctrl=MCRST145ZI148953&id=148953>

#### **Calculator CO2 Refrigerant Gases**

[http://www.netenvira.com/netenvira/espanol/inicio\\_292\\_1\\_ap.html](http://www.netenvira.com/netenvira/espanol/inicio_292_1_ap.html)

#### **Other measures**

Gasoline Density Factor = 0.76

1 kWh = 0.0036 GJ

#### **Chemical products**

Densities have been applied to transform from liters to kilograms

### **Annex 2: Applicable legal requirements**

	<b>Concept</b>
<b>general</b>	1. Activity and opening licenses
	2. Registration in the Tourist Activities and Establishments Register
	3. Certificates of tourist places
	4. RC insurance
<b>Water supply and spillage</b>	1. Permit to connect to the sewer network
	2. Authorization of wastewater discharge (according to ordinance it does not request it)
	3. Analysis of wastewater (Balearic Islands Hydrological Plan)
<b>Water reuse</b>	1. Authorization to carry out that reuse
<b>Waste</b>	1. Registration in the Register of Small Producers of Toxic and Hazardous Waste
	2. Waste acceptance documentation
	3. Communication Department quantities produced waste
<b>Noises and / or vibrations</b>	1. Noise measurements
<b>Low voltage</b>	1. OCA inspection

<b>electrical installation</b>	
<b>Boilers (ACS / Heating)</b>	1. Commissioning authorization
	2. Maintenance contract with external company
	3. Combustion analysis
	4. Maintenance according to Legionella regulations.
<b>Domestic boilers laundry</b>	1. Maintenance contract
	2. Certificate of inspection
<b>Natural gas</b>	1. Certificate Installation gas (boilers + laundry)
	2. Gas installation review (every 5 years)
	3. OCA Inspection of Endesa
<b>Refrigerant installation and refrigeration</b>	1. RITE maintenance contract
	2. Legalization of refrigeration installation in industry
	3. Legalization of thermal installation in industry
<b>Elevators</b>	1. Maintenance contract with external company
	2. Last inspection carried out (every 2 years)
<b>Own vehicles</b>	1. Last inspection (ITV)
<b>Swimming pools</b>	1. Self control
<b>Fire protection system</b>	1. Fire central maintenance contract
	2. Last revision made on fire extinguishers and hoses
	3. Retired extinguishers (every 5 years)
	4. Fire central review
<b>Emergencies</b>	1. Emergency plan
<b>LOPD</b>	1. Registration of databases in the Data Protection Agency
<b>Architectural Barriers</b>	1. Compliance with current law
<b>Refrigerant gases</b>	1. Leakage control record book
	2. Updated list of refrigerant gases used
	3. Certified maintenance companies
	4. Annual Review <30Kg
	5. Rev. Semiannual > 30Kg

### **Annex 3: Regulations applicable to legal requirements**

- Autonomic Law Llei 8/2012, of July 19 of the tourism of the Balearic Islands
- BALEARES, Law 7/2013, of November 26
- STATE, Royal Legislative Decree 1/2001 approving the revised text of the Water Law

- STATE, Law 22/2011, of 07/28/2011, ON RESIDUES AND CONTAMINATED SOILS
- STATE, Royal Decree 833/1988, Approves the Regulation that develops Law 20/1986, Basic Toxic and DANGEROUS RESIDUES
- STATE, Royal Decree 180/2015, which regulates the transfer of waste within the state
- LOCAL, Municipal ordinance for the protection of the environment against noise and vibration pollution (April 5, 2014)
- STATE, Royal Decree 842/2002, BT - The Electrotechnical Regulation for LOW TENSION, ITC-BT-05 is approved
- STATE, Royal Decree 1027/2007, the Regulation of Thermal Installations in Buildings (RITE) is approved
- BALEARES, Decree 57/2010, develops and complements various regulatory provisions established in Royal Decree 1027/2007, of July 20, which approves the Regulation of thermal installations in buildings (RITE)
- STATE - Royal Decree 1027/2007, the Regulation of Thermal Installations in Buildings (RITE) is approved, MODIFIED BY Royal Decree 238/2013, of 04/05/2013, Certain articles and technical instructions of the Regulation of Thermal Installations in the Buildings, approved by Royal Decree 1027/2007, of July 20. (BOE nº 89, of 04/13/2013)
- STATE, Royal Decree 88/2013, of 08/02/2013, approves the Complementary Technical Instruction AEM 1 "Lifts" of the Regulation of lifting and maintenance equipment, approved by Royal Decree 2291/1985, of November 8. (BOE nº 46, of 02/22/2013)
- STATE, Royal Decree 1942/1993, the Regulation of FIRE Protection Facilities is approved
- BALEARES, Decree 8/2004, certain aspects of the Law of Emergency Management in the Balearic Islands are developed
- STATE, Royal Decree 393/2007, of 03/23/2007, The Basic Regulation of SELF-PROTECTION of the Centers, Establishments and Dependencies dedicated to Activities that may give rise to Emergency Situations is approved
- STATE, Royal Decree 742/2013, of September 27, establishing the technical-sanitary criteria for swimming pools
- STATE - Organic Law 15/1999, of December 13, Protection of Personal Data.
- AUTONÓMICA, Decree 110/2010 of October 15, which approves the Regulation for the improvement of accessibility and the removal of architectural barriers

***Environmental Statement Validated by***

MR . Juan E. Fernandez Gajate , of TÜV Rheiland Ibérica Inspection, Certification and Testing .,  
Environmental verifier accredited by ENAC Nº ES-V-0010.

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