Bulletin: 2008
Zumaia, 31 March 2009

Notable actions

- ***Elimination of Emission Source Cleaner for Crankshafts – Camshafts. Replacement with Pressure Washer using soapy water***
- ***Project to replace Solvent-Based Paints with Water-Based Paints***
- ***Inspection of the Chemical Product Warehouse.***
- ***Reduction of Atmospheric Emissions from Gas Engines. Launch of new HGM560 gas engine***

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Year 2008

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INTRODUCTION — Brief history of GUASCOR

The **GUASCOR Group** began as the company Gutiérrez Ascunce Corporación, S.A., located in Zumaia.
GUASCOR POWER is the **Equipment Division** of the GUASCOR Group, with over 36 years of experience producing its own technology to manufacture reciprocating internal combustion engines using gasoil and gas fuels, marine propulsion and auxiliary applications, generation, cogeneration and trigeneration sets, and containerised electrical generation and cogeneration sets.
In 1994, GUASCOR began a reconversion process. The company underwent a **change of ownership** and became part of the GUASCOR Group.
Since then, the company has been integrating **quality, occupational risk prevention and environmental management systems** into its processes in order to ensure its future success.
Ten years ago, GUASCOR POWER became an industry pioneer by receiving **ISO 9001 quality management certification**. This was an acknowledgement of a long tradition in the manufacture of reliable, robust, durable engines and systems, which provide a high degree of satisfaction to our customers. GUASCOR POWER, firmly committed to the care and preservation of the environment, distinguished itself six years ago by obtaining **ISO 14001 environmental management certification**, which it also renewed in compliance with the new ISO 14001:2004 standard.
We are currently involved in the certification process for an **occupational risk prevention management system** in accordance with the **OHSAS 18001** standard.

At GUASCOR POWER, we are proud of the fact that our products and services, in addition to being environmentally friendly, are manufactured in accordance with environmentally efficient processes.
This accreditation certified that the production of diesel and gas engines, marine propulsion and auxiliary systems, generation and cogeneration systems, and Electrical Energy production at our generation plant are compliant with the requirements of this standard, and that those aspects generating environmental impact are adequately managed and focused on contamination prevention and
continuous improvement.
This new Management System is subject to continuous external reviews, but any effort is worthwhile if it means that those who know us well continue to place their trust in us.
If you would like more detailed information about GUASCOR and its products or services, please visit our website: **www.guascor.com**

ENVIRONMENTAL SUSTAINABILITY REPORT

Since the year 2001, GUASCOR POWER has published an annual internal **Simplified Environmental Report or Sustainability Report**, reflecting our commitment to sustainable development.
These reports are based on verifiable data, which provide transparent, systematic evidence of the company's environmental performance.
This practice forces us to constantly improve our information collection mechanisms, and to comply more rigorously with our action plans and the achievement of our intended objectives.

GUASCOR POWER S.A.U. Barrio de Oikia, 44. P.O. Box 30. E-20759. Zumaia. Gipuzkoa. Spain. Tel.: 34-943 865200. Fax: 34-943 865235. guascor@guascor.com. www.guascor.com

Low Environmental Impact Painting and Degreasing Cabinets

Degreasing Cabinet

Painting Cabinet

Oikia Plant in Zumaia, next to the Urola River

Industrial water purification facility

ENVIRONMENTAL IMPACT EVALUATION

GUASCOR POWER evaluates the environmental impact of its processes annually.
Based on the results of the evaluation, we establish **environmental objectives and targets oriented towards continuous improvement**, specified in the corresponding action plans.
The information presented in this simplified environmental report is for the year **2008**, and is duly supported by environmental management system records.
The following pages show the main results and the environmental improvement actions undertaken.

ATMOSPHERIC EMISSIONS

Potential Sources of Atmospheric Contamination

During the year 2008, the company **eliminated the Crankshaft and Camshaft Cleaner, a potential source of contamination, and replaced it with a Soap Pressure Washer.**

Atmospheric Emissions Emitted by the Product

In 2008, the new HGM560 gas engine was launched, with 1/2 TA Luft emissions, surpassing the requirements of current 1 TA Luft legislation.

Legionellosis prevention and control

In accordance with Royal Decree 865/2003, dated 4 July, GUASCOR has certain equipment installed that poses a **legionellosis risk**, such as refrigeration towers, air conditioning units and hot water boilers.
All measures provided for by law have been implemented in order to ensure that these high-risk areas remain free of Legionella.
In addition, the system has passed the periodic inspections and reviews conducted by the health authorities, who have detected no anomalies.

WASTE DISCHARGE

Waste water from industrial processes is treated by an **industrial waste water purification facility** and later reused in the test bank refrigeration circuit.
There is authorised waste discharge for occasional cleaning of the supply water processing system, and the refrigerant pool is periodically emptied for maintenance.
Waste water from industrial processes is treated by an **industrial waste water purification facility** and later reused in the refrigeration
circuit for the test bank. There is authorised waste discharge for occasional cleaning of the supply water processing system, and the refrigerant pool is periodically emptied for maintenance.
Periodic analyses of significant waste discharge parameters are performed as established by law.
Sewage is also treated by a **sewage purifier**.
Sewage discharge is also authorised by the administration, and waste discharge parameters are analysed every six months as established by law.
The **high quality of the waste water discharged** was maintained once again in the year **2008**, and the parameters were well below the legal limits established by the administration.
The **average values** obtained in the analysis of the waste discharge performed in the years **2007**-**2008** are shown on the following table:

Parameters analysed (legal limit — Table III)	Filter Washing	Resin Washing	Refrigerant Pool	Industrial Purification	Sewage
pH (5.5 - 9.5)	7.5 / 7.4	7.15 / 6.95	7.63 / 7.53	7.1 / 7.73	7.85 / 7.5
DQO (mgO_2/l) (160)	30 / 19	30 / 22	30 / 21.25	47.25 / 23.75	30 / 22
DBO5 (mg/l) (40)					7.5 / 7.5
Solids (mg/l) (80)	2 / 2	3 / 2	3 / 2,5	3.25 / 3.5	12.5 / 2
Oils, Greases (mg/l) (20)	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5
Ammonium (mg/l) (15)					1 / 1
Deterg. (mgLAS/l) (2)	0.08 / 0.08	0.05 / 0.08	0.08 / 0.08	0.11 / 0.09	0.08 / 0.08
Orthophosphates (mg/l) (10)			0.65 / 1	1.35 / 0,31	
Iron (mg/l) (2)	0.1 / 0.15	0.15 / 0.15	0.2 / 0.13	0.1 / 0.13	
Copper (mg/l) (0.2)			0.10 / 0.10	0.1 / 0.1	
Zinc (mg/l) (3)			0.15 / 0.11	0.06 / 0.05	

Source: Reports issued by GIKESA, an independent monitoring entity authorised by the administration (values for 2007/2008).

GENERATION OF WASTE AND PACKAGING ON THE MARKET

Waste generated by hazardous type industrial activities, assimilable to urban and construction waste (occasional), is segregated, labelled, stored and later managed, in compliance with the regulations established by the administration.
GUASCOR POWER has a **hazardous waste minimisation plan**, created in 2005, that will remain in force until 2009.
The company also makes **annual production declarations** of hazardous waste and marketed packaging, in compliance with the limits established by legislation.
The amounts of waste generated in 2008 are shown in tonnes:

Waste	Description of Waste Generated	2008	2007	% Red.
Hazardous Waste	Purifier sludge, used oil, paint sludge, paint water, solvent, contaminated solids, plastic packaging with HW, metal packaging with HW, batteries, fluorescent tubes, used active carbon.	49,69	31,43	36,75
Inert Waste	Scrap and Turnings, Toner, Sewage Sludge	68,72	33,18	51,72
Waste Assimilable to	Industrial packaging rubbish (Total)	120,30	103,36	14,08

Source: Information contained in SGA records. Waste generation declaration by GUASCOR POWER

SOIL CONTAMINATION EVALUATION

GUASCOR POWER, in compliance with the new contaminated soil regulations set forth in Royal Decree 9/2005, dated 14 January, and Law 1/2005, dated 4 February, has prepared a **preliminary soil evaluation report** for the Zumaia facility and the investee companies AIES GILBES. This report has been submitted to the administration, and administrative resolution is pending.

NATURAL RESOURCE CONSUMPTION

Over the past three years, **water, gasoil and natural gas consumption** have decreased significantly.
In order to compare annual consumption proportionally to the company's activities, consumption indicators are used so that consumption is comparable.
Only electrical energy consumption has increased. The causes of this increase were the addition of new machines, which have resulted in greater consumption during the production process.
The following table shows the **results of the consumption indicators** for the years 2006 and 2008, and the percent reduction achieved.

Consumption Indicator	2006	2008	% Reduction
Water (m3/No. of Cylinders (Equipment Produced+Marketed+Containerised))	1,44	0,93	**35,42%**
Electricity (Kwh/No. of Cylinders (Equipment Produced+Marketed))	165,81	242,73	**-46,39% _**
Gasoil (L/No. of Cylinders (Diesel Engines+Containerised Diesel))	172,31	37,43	**78,28**
Natural Gas (m3/No. of Cylinders (Gas Engines+Containerised Gas)+Hours Worked)	85,01	29,8	**64,95%**

Source: Information contained in SGA records.
_ Increase due to the incorporation of the machining of 100% of the L. blocks into the process. In addition, a new paint and degreasing cabinet has been installed, which has caused an unforeseen increase in electrical consumption. In the year 2008, electrical consumption was reduced by 3.5% compared to 2007.

***Water consumption indicator**: m3/No. of Engines+containerised units)*
***Electricity consumption indicator**: Kwh /No. of Engines+containerised units*

Sound-insulated containerised set at the Enamora pilot biomass plant

Triennial Environmental Improvement Programme

View of the equipment at the biomass plant in Biocerceda

NOISE AND ADR

Noise

In **2007**, **measurements were taken by an Authorised Monitoring Entity** of the **external noises** resulting from the activity, in the most unfavourable places and situations from an acoustic emissions perspective.
The **results** obtained **comply** with the requirements established by **EUDEL** for **noise levels** in industrial areas.

ADR

At GUASCOR, all **loading and unloading** of **hazardous goods** is **performed** by **personnel** properly **trained** by the Safety Advisor.
GUASCOR POWER issues a **Safety Advisor Report** on **activities** involving **hazardous goods,** in **compliance** with **ADR regulations**.

ENVIRONMENTAL AND PREVENTION TRAINING

In **2008**, **awareness training sessions** were held at GUASCOR POWER as part of the **Environmental Management System** and the **Occupational Health and Safety Management System** , addressing new and existing personnel. Training was also provided for activities involving the **loading and unloading of hazardous goods** to provide participating personnel with the proper qualifications.

ENVIRONMENTAL OBJECTIVES FOR 2007 — 2009

For the period from 2007 to 2009, an **environmental improvement programme** has been planned, based on the significant aspects selected from environmental evaluations conducted at GUASCOR POWER.

As part of this programme, five improvement objectives have been established.
The following charts show the objectives achieved in 2008, the quantified improvements and the objectives not reached by the end of 2008. The pending objectives shall be pursued throughout the rest of the three-year continuous improvement programme.

Objectives Achieved	Results Obtained
Improvement of the Environmental Impact of the Painting Process - Except Atmospheric Emissions	Installation of the Degreasing and Painting Cabinets, reduced emissions, improved productivity and reduced waste. Complied with Reductions in Paint Sludge Generation (2.05%), Paint Sludge Management Costs (7.26%) and Paint Consumption (3.85%).
Reduced Natural Resource Consumption	Complied with Objective to Reduce Natural Gas Consumption (94.9%).
Improved Waste Management	Reduced Waste Management Costs (61.96%). Reduced Sewage Sludge (71.84%).
Reduced Atmospheric Emissions from Painting Cabinet	COV levels have been reduced (71.26%).
Reduced Atmospheric Emissions Emitted by the Product	The new HGM560 gas engine, which complies with the new legislation, is now on the market.
Improvements in the environmental management system	Objectives have been achieved for the No. of annual environmental accidents (0), No. of environmental reports (18), No. of training actions (2), No. of environmental NCs pending closure (0) and No. of preventive actions initiated during the year (9).

Source: Information contained in the follow-up report for the environmental programme.

Pending Objectives (end of 2008)	Results/Actions
Improvement of the Environmental Impact of the Painting Process - Except Atmospheric Emissions	The reduced solvent consumption objective has not been achieved (5.13%). Action: Adoption of water-based paints.
Reduced Natural Resource Consumption	The reduced electrical energy consumption objectives have not been achieved (0.74%).
Improved Waste Management	The Industrial Sludge reduction objective has not been achieved (1.95%). The action to replace HW managers with others using waste valuation processes has been dismissed. Action: Dismissed.
Soil	The buried fuel tanks have not been replaced. Action: Investment in tanks is planned for 2009.
Improvements in the environmental management system	Objectives were not achieved for legal non-compliance NCs (1) and environmental NCs initiated during the year (2).
Dismissed Objectives (end of 2008)	Results/Actions
Reduction of Atmospheric Emissions Emitted by the Product	The project to develop a new CRC Diesel engine is now on hold. Other development projects are prioritized.

ENVIRONMENTAL POLICY

GUASCOR POWER has approved an environmental policy, contained in the implemented Environmental Management System, consistent with the requirements of standard UNE-EN ISO 14001:2004.
GUASCOR, S.A. is aware that our quality of life is unavoidably linked to respect for the Environment. We believe that our business activities and the protection of the Environment are two realities that can and must go hand in hand, on a foundation of sustainable development. This will allow us to meet our present needs without compromising our ability to provide for the needs of future generations.
Our intention is to be acknowledged by our customers, employees and the community as a responsible company, committed to continuous environmental improvement and to contamination prevention at the source.
In order to develop this policy and meet these commitments, **GUASCOR POWER** has documented, implemented and maintains an Environmental Management System suitable to the nature, magnitude and impact of its activities, products and services, in order to ensure:

- Periodic establishment of **objectives, targets and environmental management programmes** integrated in our business decisions, as well as the mechanisms to review them in order to achieve improved environmental performance.
- Compliance with **applicable legal requirements and other commitments** to which we subscribe, which are related to environmental application aspects.
- Evaluation of the impact of the **environmental issues generated**, in order to prevent, eliminate or minimise them.
- Availability of the required elements and establishment of the necessary measures to **prevent accidents** that could have significant repercussions **for the Environment**.
- The use of **audits** as an effective tool for continuous improvement, as well as an element to monitor and predict possible risks.
- The maintenance of lines of **communication with relevant external agents**, providing information on the organisation's actions in the area of environmental conservation.
- The promotion of **participation, involvement and a sense of environmental responsibility in all persons** who work for or on behalf of the organisation, through appropriate communication, training and awareness.
- The promotion of **resource conservation** by adopting processes that reduce the use of natural resources, promoting the **reduction, reuse or recycling of waste**, and establishing **objectives to reduce atmospheric emissions and improve waste discharge and management**.

With this document, the management of GUASCOR

River pusher craft equipped with GUASCOR engines

Fuel transport ship equipped with a GUASCOR—Green Oil engine

Introduction of the new SFC180TA engine featuring the Common Rail system

Introduction of the newly developed SFDF180TA Dual Fuel engine

Environmental Management System
GUASCOR POWER S.A.U.
Barrio de Oikia, 44. P.O. Box 30
E-20759 - Zumaia
Gipuzkoa - Spain
Telephone: +34 943 865200
Fax: +34 943 865235
email: guascor@guascor.com
Web: www.guascor.com

Environmental Sustainability Report Distribution

Internal: GUASCOR POWER
GUASCOR GROUP
External: Department of the Environment and Regional Development, Basque Government

SF360 TALG sound-insulated containerised sets, Cuba

MISSION

GUASCOR POWER is an industrial company integrated in the **GUASCOR GROUP**, devoted to the *design, manufacture and post-sales service of diesel and gas reciprocating internal combustion engines, reducers, marine propulsion and auxiliary systems, power and cogeneratio*n systems.
GUASCOR POWER works with its own technology, providing logistical support to operating systems and seeking to satisfy its customers' needs while acting on the global client-supplier market, collaborating with the best suppliers and applying continuous improvement practices.
Through all of the above, it will achieve:

- The complete trust of its customers.
- The creation and maintenance of a stable workforce.
- To promote the professional development of personnel.
- To preserve the environment by creating technologies and systems that minimise emissions and contaminating waste discharge, and use renewable or deimpact technologies.
- In short, it will generate wealth through industrial activity for shareholders, employees and society as a whole.

VISION

GUASCOR POWER wants to be internationally recognised in the propulsion and power system manufacturing sectors as a future-oriented company with its own technology, which excels in development, manufacturing and post-sales service.

VALUES

GUASCOR POWER considers the following values to be its own:

- Dynamic, competitive, profitable company.
- Oriented towards Customer Satisfaction and continuous improvement, Sensitive to market demands.
- Innovative and creative, founded on training, participation and teamwork through its own resources and the official network of workshops.
- A company that works with dedication and honesty.
- A company that contributes to the overall development of its environment.

ENVIRONMENTAL MANAGEMENT PROGRAMME 2007 — 2009

Objective	Target	Indicator
Improvement of the environmental impact of the painting process - except atmospheric emissions	Installation of Painting Cabinets. Reduction of solvent consumption by 10%. Monitoring of waste generation during the painting process. Reduction of paint consumption by 3% (total).	-- IRA-007 a IRA-005 a-b IRA-006 IRA-008
Reduction of natural resource consumption	1% annual reduction of electrical energy consumption. 2% reduction in Natural Gas consumption.	IRA-003 IRA-010
Improvements in waste management	Analyse probability of improvements in the purification process for a 3% reduction in purifier sludge.	IRA-015 IRA-011 --

	Analyse 4% reduction of waste management costs. Analyse final destinations of HW. 5% reduction of sewage sludge.	IRA-016
Reduction of atmospheric emissions from painting	5% reduction of COV emissions through diffuse and direct emissions from the painting cabinet.	IRA-006
Reduction of atmospheric emissions from the product	Reduction of atmospheric emissions emitted - Diesel engines. Reduction of atmospheric emissions emitted - Gas engines.	IRA-017 IRA-018 IRA-019
Soil	Reduction of the risk of gasoil leaks from buried fuel tanks	--
Improvements in the environmental management system	Elimination of NCs for non-compliance with legal requirements, accidents or environmental incidents (zero NCs and a 30% reduction in environmental non-conformities). Compliance with external environmental communication plan (> 12 reports per year) and environmental training plan. Initiation of at least two preventive actions per year.	ISGA-001 ISGA-002 ISGA-005 ISGA-006 ISGA-003 ISGA-004 ISGA-007