ENVIRONMENTAL STATEMENT 2021 (Data period: April 2021 - March 2022)





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1.1 Introduction

DENSO CORPORATION was established in Japan in December 1949 and is devoted mainly to the production of components for the automotive sector.

Aware of the environmental repercussions of its activities and based on its philosophy, DENSO formulated the DENSO Environmental Charter and the DENSO Environmental Action Plan in 1993 to clarify its fundamental mind-set and to define the steps toward realizing the goals of the Environmental Action Plan.

Fundamental principles

DENSO philosophy DENSO Environmental Charter

DENSO PHILOSOPHY PRINCIPLES

• Customer satisfaction through high quality products and services

- Global growth through anticipation of change
- Environmental preservation and harmony with society
- Corporate vitality and respect for individuality

Planning and objectives

DENSO Environmental Action Plan. Ecovision 2025.

Environmental Protection Activities and Management

Management and activities based on Environmental Management Systems (ISO 14001) and Energy Management Systems (ISO 50001).

Through the "DENSO Environmental Action Plan", DENSO CORPORATION promotes the obtaining of ISO 14.001 certification for all the plants of DENSO around the world.

DENSO BARCELONA, **S.A.U (DNBA)** has been the group's first plant in Europe and one of the first in the world to be certified with the Energy Management System ISO 50.001 and now it has renewed the Energy Management System ISO 50.001: 2018.

DENSO BARCELONA, S.A.U (DNBA), with the code CNAE 2931 "Manufacture of electronic and electrical equipment for motor vehicles", has certified its Environmental Management System according to ISO 14001 (since December 1998), EMAS II Regulation (CE) n° 761/2001 (since March 2000), EMAS III Regulation (CE) n° 1221/2009 (since 2009) new EMAS regulation (UE) 2017/1505 (since 2018), modification of annex IV according to Regulation (CE) n° 2018/2026 (since 2020) and ISO 50.001 (since 2016). For which purpose this Statement has been drawn up.

1.2 Company location

Denso Barcelona, S.A.U. is located in the industrial estate "Pla de Santa Anna" in the municipal district of "Sant Fruitós de Bages" in Bages country (province of Barcelona). The construction takes up a total area of 46.200 m² between the two buildings DNBA B1 and DNBA B2.



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1.3 Activity of the company

Denso Barcelona, S.A.U forms part as a subsidiary and production plant of the DENSO CORPORATION multinational. The design work of the products made in DNBA is done along with the DENSO design centers in Europe and Japan.

The customer contacting sales work is carried out entirely through the pertinent sales offices: DENSO INTERNATIONAL EUROPE, with headquarters in the Holland, and DENSO INTERNATIONAL AMERICA INC., with headquarters in United Estates.

According to the EMAS register, the company activity is based on the manufacture of the following products for the automotive industry at the DNBA facilities on calle Sakura of the "Pla de Santa Anna" industrial estate in Sant Fruitós de Bages:





YEAR	EVENTS	PRODUCTS	CERTIFICACIONS AND AWARDS
1991	Name change: VND -> NDMB (ND 100%).	DLI.	Certificación FORD Q1.
1993-95	1st Company expansion.	ECU (E/G, A/C), Distributor / Igniter.	Q.A. Award Generalitat. TOYOTA Achievement in Quality.
1996	Name change: NDMB -> DNBA.	BODY ECU.	ROVER Supplier Excellence Gold Award.
1997-99	2nd Company expansion.	D-DLI + S-IIC.	ISO 9001, QS 9000, ISO 14001. TOYOTA Outstanding award.
2000-03	3rd Company expansion. X Anniversary.	STICK COIL, AFM, EVRV, O2 SENSOR, METER CLUSTER.	EMAS certificate. TOYOTA: Outstanding in Delivery & Cost, Recognition in Project mgt & Delivery.
2004-05	4th Company expansion.	AC, PANEL T5.	Certification ISO/TS-16949.
2006	5th Expansion area ELEC.		TOYOTA: Achievement in Supply, recognition in Quality, outstanding in Cost.
2007	6th Expansion area ELEC.		TOYOTA: Achievement in Supply, Outstanding Award Delivery.
2008	7th Expansion area WH.	POWER MANAGEMENT ECU.	TOYOTA superior in Quality.
2009			TOYOTA superior in Quality, recognition in Cost, recognition in project management.
2010		DNBA starts Meter crystals production in the new area of Molding.	EOA Certificate (Economic Operator Administrator). TOYOTA best Supplier. EMAS X years of Environmental Best Practices.
2011-12	XX Anniversary.	Finish the Coils 6T production (power units).	OHSAS 18001 Certificate.
		Finish the Coil production.	VOLVO Quality Excellence. SUZUKI Best 1-1-1 activity.

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YEAR	EVENTS	PRODUCTS	CERTIFICACIONS AND AWARDS
2013		BPC (Blower Pulse Controller), TPMS (Tire Pressure Monitor System).	"Territori Award" Col.legi d'Enginyers Tècnics Industrials de Manresa.
2014	First phase 8th Expansion. New technical center, office expansion & new entrance.	Head Up Display. Shift by Wire.	GM Quality Excellence Award.
2015	Second phase 8th Expansion. New MNT Center & New Inspection Center Laboratory.	Visio Park. Finish O2 SENSOR production.	ISO 50001 certificate.
2016	XXV Anniversary New Cantine expansion.	Aluminium injection Trial production.	Toyota Self-Reliant Proj. Management Award, Delivery Award and Quality Award. Volvo Quality Excellence. Best Company Facilities of Europe. TOYOTA: "Achievement award" Supply. Excellent Factory.
2017	9th Company expansion. New Warehouse DNBA B2.		IATF 16949 certificate. TOYOTA: Best Quality. CIAC award to the best automative company in Catalonia. Best Company Facilities of Europe.
2018	10th Expansion area ELEC (phase 10.1).	Finish STICK COIL production.	President Award. Excellent Factory. Sant Fruitós City Hall Award "Best environmental project". TOYOTA: Best supply.
2019	10th Expansion area ELEC (phase 10.2).		Toyota Quality Silver Award
2020			Toyota Quality Achivement Award. EV EF Excellent Company.
2021	11th Company Expansion (phase 10.3 Service Area & 11.1 WH Shipping).		

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1.4 General parameters

The annual global production in DNBA in the FY2O21 has been **351,2** M€. We define annual production as the production obtained and quantified in euros.

To make this quantification in euros, we preset a sale price for each product with a gross added value (difference between the amount produced and the material costs) of **169,2 M**€.

The number of employees in FY2021 was **845**.



Aerial photograph of Denso Barcelona, S.A.U.

1.5 Products manufactured in Denso Barcelona, S.A.U

The products made by DNBA are divided in to three large automotive business groups and contribute to covering all the business managements:

Electronic Systems (BPC, Engine ECU, Power Management, SBW, TPMS, Smart ECU, Main Body and A/C ECU) and **Cockpit Systems**, **AD & ADAS** (Meter, Head Up Display, A/C Panel and Visio Park).

PROCESS A:	PROCESS B:	METER CLUSTER/HUD:
Assembly of surface components on the top face of	Aluminium injection for the manufacture of the product exterior housing.	Plastic injection for the manufacture of the lower housing.
the printed circuit and fusion welding. Insertion of conventional components (axial and	Assembly of surface components on the top and bottom face of the printed circuit.	Printed circuit assembling (in previous process) until the welding step.
radial). Insertion of components of nonconventional forms.	Insertion of conventional components (axial and	Functional verification of the product.
Assembly of surface components on the lower face	radial). Insertion of components of nonconventional forms.	Ant humidity coating and cutting of the printed circuit board.
of the printed circuit.	Assembly of the connector, power transistors, relays,	Assembling of the different parts.
Assembly of the connector, power transistors, relays, etc. and wave soldering.	etc. and wave soldering.	Lower case screwing
Functional verification of the product.	Functional verification of the product. Ant humidity coating.	Assy calibration and powder cleaning
Ant humidity coating.	Final assembly of the product (box, cover, etc.) and	Front crystal assembling
Final assembly of the product (box, cover, etc.) and	labeling.	Functional verification at room temperature and visual inspection.
labeling.	Final check and inspection of the product.	Package and shipping.
Final check and inspection of the product. Package and shipping.	Package and shipping.	



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The main customers of Denso Barcelona, S.A.U are:



Certifications:



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1.6 Flowchart



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2.1 Description of the Environmental and Energy Management System

The Environmental and Energy Management System implemented by Denso Barcelona, S.A.U has been prepared by following the guidelines and complying with the requirements of the following standards:

• UNE-EN ISO 14.001. Environmental Management Systems. Specifications with guidance for use.

• Council Regulation (UE) 2017/1505, allowing voluntary participation by companies in the industrial sector in a community eco-management and audit scheme.

• UNE-EN ISO 50.001. Energy Management Systems. Specifications with guidance for use.

The foundation of the Environmental and Energy Management System of Denso Barcelona, S.A.U is the **Environmental & Energy Policy**, whose basic principles are compliance with legislation and other requirements, the prevention of pollution and continuous improvement.

The Environmental and Energy Policy has been defined by the Top Management based on the DENSO philosophy principle: "Environmental preservation and harmony with the society."

Starting from the Environmental & Energy Policy and having in mind, among other things, significant environmental aspects and legal and other requirements, the annual **Environmental and Energy Targets** and the **Program** for their implementation are planned.

To achieve fulfilment of the Environmental and Energy Policy, the Management System has been documented and structured in the following way:

•Environmental Manual: It describes the responsibilities of the organization and the elements that the Management System is composed of, making reference to the procedures related with each element.

•Procedures: They describe the operations to be carried out for the fulfilment of the system requirements.

•Work Instructions. They describe in a more detailed way specific operations related with the procedures.

The Managing Director of Denso Barcelona, S.A.U, Josep Macià, as the person responsible for the company has delegated to the General Director of Environment and Safety Cristina Puig and the Director of Environment and Safety, Xavier Trias, the authority and responsibility for assuring that the requirements of the Management System are fulfilled, also creating for that purpose the Environmental and Energy Committee made up of members of the various sections of the company.

Periodic reviews of the Management System through internal audits and external ones (maintenance audits by the certification body), as well as the review by Top Management, provide for the continuous improvement of the system.

2.2 Environmental and Energy Policy Denso Barcelona, S.A.U

We will now set out the environmental policy of DENSO BARCELONA, S.A. The area of application of our policy is the manufacturing of electronic, connected & cockpit and safety components for the automotive industry. Under this policy, we engage in the conservation of local environment and global environment, contributing with the society for improve our environment.

•To develop an open relationship with the society and put information available to the public on the environmental repercussions of our activities.

•To adopt the possible measures to reduce the environmental risks of our activities, focusing on continuous improvement in the environmental conservation and energy performance.

•To identify and to evaluate the environmental repercussions of our activities, preevaluating the repercussions of new activities, products and processes as well as examining any significant impact of these activities on the environment.

•To carry out actions to prevent, eliminate or reduce the emission of pollutants making a responsible usage of resources and thus mitigating the Climatic Change.

•To heighten the workers' awareness and to train them in order to promote a positive attitude towards environmental preservation and rational use of energy.

•To inform the external companies working in DNBA about the need for adopting our environmental and energetic attitude and principles.

•To review the Environmental & Energy Management System periodically, keeping in mind any potential significant impacts of our activities on the environment.

•To contribute to the continuous improvement of our environmental and energetic performance with the commitment to ensure the availability of information and resources needed to achieve the objectives and targets, with a view to reduce the environmental impacts as much as possible.

• Purchasing of energy efficient products and services, gradually promotion of renewable energy production and purchasing of this energy, making DNBA a Neutral factory in CO2 emissions.

•To keep watch over the fulfilment of the energy and environmental legislation applicable and other requirements relating to the use and energy consumption, energy efficiency and environmental aspects of DNBA.

Note: For the manufacturing of the products, account is taken of the customers' environmental requirements through Denso Japan.

•Denso Barcelona, S.A.U undertakes to examine and to review its environmental policy periodically and to make it known to all its associates and to the public in general.

SHE DIRECTOR	SHE GENERAL DIRECTOR	DNBA MANAGING DIRECTOR	
X. TRIAS	C.PUIG	J.MACIÁ	Fecha : 14/05/2021 (17 th review)

DFNSO

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2.3 Analysis of the parties interested in the DNBA Environmental Management System



DENSO GROUP (ISO 14001, ISO 50001, EMAS, Action Plan ECOVISION 2025 y CO2 Neutral)

MANAGEMENT (Values, policy,



environmental and energy targets, ...)





LOCAL ADMINISTRATION

COMMUNITY

AND SOCIETY

(Legal compliance, absence of noise, smoke, smell)

STATE

ADMINISTRATION

(Legal compliance)

(Legal compliance, CSR activities)



SUPPLIERS, **CUSTOMERS** AND END USERS

(Specific requirements, prohibition of 🐨 🚭 💹 🛞 🌍 🚥 🖘 🔂 😥 substances, ...)

DNBA ENVIRONMENTAL MANAGEMENT SYSTEM

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The significant life-cycle environmental aspects are detailed below.

These are evaluated using qualitative and quantitative criteria regarding applicable quality and legal requirements.

To determine which aspects are significant, they are assessed according to established criteria under normal, abnormal and emergency conditions.

The established criteria are:

Normal conditions	Abnormal and emergency conditions
 N1 criterion: Quantity/Volume produced. 	
 N2 criterion: Applicable legal requirements. 	○ AE1 criterion: Frequency.
 N3 criterion: Frequency. 	\circ AE2 criterion: Interaction with the receiver
\circ N4 criterion: Interaction with the receiver medium.	medium.
 N5 criterion: Complaints. 	$\circ~$ AE3 criterion: Detection and prevention systems.
 RN criterion: Amount of natural resources consumed. 	 RN criterion: Occurrence of the situation with respect to the consumption of natural resources.
 IN/OAD criterion: Indirect aspects and other direct aspects (particularly assessed). 	

Direct significant aspects:

SIGNIFICANT ASPECT	PROCESS/FACILITY	ІМРАСТ	RECOMMENDED IMPROVEMENTS/ACTIONS
Generation of contaminated absorbent materials.	Production, maintenance and warehouse processes.	Accumulation in landfills and atmospheric emissions derived from incineration.	Reduction of contaminated absorbent materials. Gradual introduction of the use of washable cloths in other production processes (expansion of this activity).
Silicon and fat waste.	Production, maintenance and warehouse processes.	Accumulation in landfills and atmospheric emissions derived from incineration.	Promote activities to reduce silicon and fat waste.
Generation of effluent contaminated by rainwater in a fire.	The whole factory.	Rainwater pollution.	All fire-fighting prevention measures are taken as per regulations.
Natural resources - Energy resources.	General facilities - Air conditioning.	Energy consumption. Natural resource depletion and CO ₂ emission.	Continue with the good management and control of energy consumption in the new extensions made.

Indirect significant aspects:

SIGNIFICANT ASPECT	PROCESS/FACILITY	ІМРАСТ	RECOMMENDED IMPROVEMENTS/ACTIONS
Other - Supplier environmental behaviour.	Supplier evaluation.	General impacts (pollution, spillage, etc.) / The environmental aspects of suppliers are assessed.	Increase monitoring to receive supplier ISO 14001 certifications.

4.1 Principal environmental improvements FY2021

Energy vector

In order to become an efficient factory energy, in the last 14 years DNBA carried out various activities to reduce the electricity consumption and thus indirectly reduce the emission of CO_2 emitted into the atmosphere.

1.- Electricity consumption < Energy Saving Day>.

On the two days of the inventory, in order to save energy on these days and to raise the awareness of the workers, an energy-saving awareness raising and monitoring campaign is carried out.



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2.- Energy consumption < Installation of solar panels (Phase III)>.

The third phase of the "DNBA Solar Panel III" project is installed, so the roof of the building already houses a theoretical power of 913 KWp ready to produce clean energy.



Solar panels installed in Phase III of the "DNBA SOLAR PANELS" project.

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3.- Energy consumption <Reduction in the consumption of Natural Gas in the warehouse>.

The reduction of Natural Gas consumption is essential to achieve DNBA's environmental goals.

The largest gas consumption is used for warehouse air conditioning.

During this year, industrial fans were installed in a part of the warehouse to break the layering of hot air, thus improving workers' comfort and gas consumption.



4.- Energy consumption < energy specifications in the new production lines >.

At DNBA we know that measuring the energy consumed is the indisputable basis for managing its efficiently. Also, that the best way to improve our efficiency in the production plant is to include energy criteria in the design phase of lines, machines, etc.

With this intention, individual energy meters have to be included in all new high consumption production lines.



energy control.

• Emissions Vector

1.- Cars low-emission.

Thanks to procedure WSHE-C-ENV-006: "Environmental criteria in the purchase of cars" created in 2015, which requires that all new company cars have low emissions, three quarters of company cars are already low-emission.



Low emissions cars in the DENSO BARCELONA car park.



Evolution of the % of low emissions company cars.

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(Diesel <108 g. CO₂/Km and Petrol < 120 g. CO₂/Km).

2.- Green energy purchase.

Incorporating environmental and efficiency criteria into the purchasing, contracting and design protocol is one of the most effective ways to reduce the environmental impact of an activity.

Denso Barcelona SAU wants to be a CO_2 neutral company. Therefore, as of FY 2020, it only buys energy produced from renewable sources (solar, wind, hydroelectric, etc.).



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3.- Environmental requirements in transport contracts.

Efficiency requirements are added for the truck fleets contracted by Denso Barcelona SAU. This new requirement reduces emissions in the short term and decreases transport costs in the medium term.

TRANSPORT	B1-B2	Classification: Euro 6
		GNC or GLP or Hydrogen or Electric
	CELOPLAS	Classification: Euro 6
		GNC or GLP or Hydrogen or Electric
	MILK RUN	Classification: Euro 6
		GNC or GLP or Hydrogen or Electric
	GLOBAL URGENT TRANSPORT	ISO 14001 certificate



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Waste Vector

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1.- Implementation of environmental specifications in approving new supplier packaging.

BEFORE

- THERE ARE NO ENVIRONMENTAL SPECIFICATIONS FOR PACKAGING USED BY DENSO SUPPLIERS.
- THE SECTION RESPONSIBLE FOR THE ENVIRONMENT IS NOT INVOLVED IN THE DESIGN OR APPROVAL OF NEW OR MODIFIED PACKAGING.



Non-recyclable packaging and inefficient packaging.



INCREASED ECONOMIC COST & ENVIRONMENTAL IMPACT.

AFTER

THE ENVIRONMENTAL SPECIFICATIONS ARE INCLUDED IN THE SUPPLIER PACKAGING MANAGEMENT PROCEDURE (CP-PC-0014).



• THE SECTION RESPONSIBLE FOR THE ENVIRONMENT PARTICIPATES IN THE APPROVAL OF THE NEW PACKAGING.



REDUCTION OF ECONOMIC COST & ENVIRONMENTAL IMPACT.

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2.- Compostable waste in the vending service.

Within the Recycling Pyramid it is better not to generate waste, than to recycle it.

DNBA intensifies its campaign for the use of reusable cups by offering financial discounts.

At the same time, in vending machines, plastic cups and spoons have been replaced by compostable cups and wooden spoons.







4.2 Environmental targets FY2021

ENVIRONMENTAL ASPECT	TARGETS	PLANNED ACTIONS
	Reduce the CO2 index of FY'20 by 5% (Kg CO2/M€).	NA. The index increased by 3.4% due to the situation of the COVID-19 pandemic, which affects air renewal directly, and due to fluctuating production.
CO2 emissions.	Reduce the CO2 index of FY'20 (LOG) by 1% (Kg CO2/M€).	OK. The index was reduced by 3.4% due to good and efficient management of the transportation of the components supplied to DNBA.
	Progress in the carbon footprint of products manufactured by DNBA (Scope 3).	OK. The carbon footprint produced in logistics, waste and water consumption is calculated.
Biodiversity.	Carry out a voluntary environmental action to improve biodiversity.	OK. Discounts are applied to promote cup reuse. Other improvement and promotion activities are postponed due to the consequences of the COVID-19 pandemic.
Waste.	Reduce Total Waste by 3% vs FY'20 (T/M€).	NA. Total Waste has been reduced by 0.6% with the improvements made to date, but it was not enough due to the increase in packaging of new components.
	Reduce Waste with Management Cost by 1.25% vs FY'20 (T/M€).	NA. Residues with Management Cost were reduced by 0.65%, but not enough due to the generation of coolants.
Energy.	Reduce the energy consumed by 7.5%.	OK. It was possible to reduce the index by 8.7% due to the actions taken to reduce the energy consumed in DNBA (activated carbon filter, centrifugal compressor, application of just-in-time activities, etc.).

4.3 Environmental targets FY2022 (April 2022 - March 2023)

ENVIRONMENTAL ASPECT	TARGETS	PLANNED ACTIONS
	Reduce the CO2 index of FY'21 by 5% (Kg CO2/M€).	 > Energy efficiency in the ESC. > Implement a Phase IV solar panel project in DNBA.
CO2 emissions.	Reduce the CO2 index of FY'21 (LOG) by 1% (Kg CO2/M€).	> Use of more efficient transportation for the components supplied to DNBA.
Biodiversity.	Carry out a voluntary environmental action to improve biodiversity.	> Donation of reusable towels for DNBA workers (waste reduction).
	Reduce Total Waste by 3% vs FY'21 (T/M€).	Implement a closed circle to reduce the cardboard used in the packaging of electronic components.
Waste.	Reduce Waste with Management Cost by 1.25% vs FY'21 (T/M€).	> Implement a closed circle of ice bags to reduce the waste generated.
Water.	Reduce the water consumption rate by 2% (m3/M€) vs. FY'21.	> Improve the consumption control system and implement efficiency requirements in the new facilities.
Energy.	Reduce the energy consumed by 7.2%.	> Apply and continue with actions to reduce the energy consumed in DNBA (activated carbon filter, use of compressor hot air, application of just-in-time activities, Solar Panels, etc.).

5.1 Water

The production processes are dry, so most water is consumed in bathrooms.

Highlight Humidification is the activity that requires the largest water supply in the electronics room. Water is also used for cooling towers, cooling circuits, heating and the watering of green areas.

Monthly consumption checks are made. A total water consumption of **9.432 m³** was considered in FY2021.

The index used to assess the evolution of water consumption efficiency is the ratio between cubic metres consumed and annual production in millions of €.



The rate of water consumption increased over the previous year. Efficient control continues to be maintained; but the consumption due to the expansion works. The improvement of the energy efficiency of the compressors and the renewal of air in the production room for hygienic reasons (COVID-19 pandemic) caused this increase.

5.2 Electrical Energy

The main form of energy used in the production process is electricity. Electricity is controlled continuously by meters connected to a digital control system.

The total electricity consumption in FY2021 was **14,225 MWh**, of which DNBA generated **0,93 MWh** with solar energy and **13,295 MWh** was brought in from outside. If we divide this amount by Total Production (million €) we get an index of **37,86 MWh/M**€.



The good trend since 2018 has been broken. The main reason is the extra energy spent on air conditioning (increased air renewal due to the COVID-19 pandemic) and unstable production that does not help energy efficiency (fixed energy consumption vs. variable energy consumption).

The decrease in gross added value compared to production has not helped this indicator either.

5.3 Natural Gas

Natural Gas is used as fuel in the heating boilers, in the radiating heating system, in the Thermal Oxidation Reducer (TOR) of the polluted gases and in some production furnaces. A monthly consumption check is made.

The total Natural Gas consumption in FY2021 was **291.005 m³**. If we divide this by Total Production (million €) we get an index of **828,60 m³/M**€.



In FY2021 we can see an increase in gas consumption. This is mainly due to the energy needed to air-condition the factory, warehouses and offices, which has increased due to the measures imposed by the COVID-19 pandemic (air renewal).

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5.4 Raw Materials

The main raw materials used to manufacture the products in DNBA are the following:



In FY2021, more raw materials were consumed due to the general increase in production.

The increase in the consumption of raw material used in the aluminium injection process (increase in production) and the slight increase in the plastic injection process (manufacturing of new products and testing of these new projects) are significant.

5.5 Wastewater

On 1 January 2014, the DENSO purifier was annulled, and the waste waters were sent directly into the wastewater drain of the estate to be transferred to the purifiers of the *Mancomunitat de Municipis pel Sanejament* in Sant Fruitós de Bages.

DNBA currently holds Disposal Permit no. N° ABO REN 2018/075. If there are no changes in the disposal, this permit will be valid until 24 January 2024.



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Despite the non-legal obligation to perform self-control analyses, in April 2019 DNBA carried out analyses that reflect the good quality of the discharged waste water, with results well below the legal limits:

DETERMINATION	RESULT	REGULATION LIMITS
рН	8,7 upH \pm 0,4 upH	6 upH - 10 upH
Soluble salts	$765\mu\text{S/cm}\pm12\mu\text{S/cm}$	6.000 µS/cm
Chlorides	63,8 mg/l Cl	2.500 mg/l Cl
Suspended materials	103 mg/l ± 15%	750 mg/l
DQO not decanted	248 mg/l O2 \pm 15%	1.500 mg/l O2
DQO not decanted 2h	$173 \text{ mg/l O2} \pm 15\%$	1.500 mg/l O2
Inhibiting materials 15'	<4 ut ± 50%	25 ut
Total phosphorus	9,4 mg/l P \pm 14%	50 mg/l P
Kjeldahl nitrogen	48,8 mg/l N ± 11% 90 mg/l N	

5.6 Atmospheric emissions

5.6.1 Green house emissions effect (CO2 equivalent)

Below are the CO2 data in equivalent emissions (due to consumption of electricity, consumption of gas and leaks in equipment and facilities of refrigerant gases) according production.



The emission factors used to transform the KWh of Electric Energy and the m³ of Natural Gas into Kg of CO₂ are 0.308 and 2.15 respectively.

• The emission factors were obtained from the Government of Catalonia Climate Change Office in 2016.

In 2020, electrical energy consumption greenhouse effect emissions are 0. This result is thanks to the DNBA policy to be a CO_2 Neutral company, by buying only electrical energy produced from renewable sources.

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5.6.2 Air emissions

The atmospheric emissions are mainly due to the varnishing operations in the electronic product production (COV's) and the radiating pipes heating boilers and burners (CO, NO_x).

DNBA has measured the atmospheric emissions to ensure regulatory compliance.

The mass flow of COV's emitted in the last analysis in 2021 was **0,33 Kg/h**, total **1710,7 Kg/year**.

The mass flow of Particles emitted in the last analysis in 2020 was **0,021 Kg/h**, total **107,3 Kg/year**.

The boilers and radiating pipes are checked periodically to ensure that the burner is working properly, giving efficient combustion and therefore reducing atmospheric pollution.

Burner of one of the radiating pipes





DNBA Boiler Room

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5.6.3 Transport air emissions.

Every quarter, DNBA checks the CO_2 emissions produced by DNBA transport (basically suppliers in Catalonia).



Due to the incorporation of more efficient trucks for transport and optimisation of their routes, the rate of pollutant emissions (CO2 and NOx) is maintained over 2020.

The emissions factor is set by the DNBA group and is equivalent to 2.58Kg CO₂/l (calculations following internal methodology).

5.7 Noise

DNBA regularly monitors noise levels and, from an environmental point of view, we will consider only exterior noise in this Statement.

In this case, DNBA's activity is carried out on the "Pla de Santa Anna" industrial estate. The applicable immission limit values are those corresponding to the acoustic map of the municipal area of Sant Fruitós de Bages.

The most critical area to evaluate is:

High acoustic sensitivity area (A):

A3 - Cabin located in a rural environment:

Point Nº 1: Mas Casagemes:

- 57 dB from 7h to 23h
- 47 dB from 23h to 7h.



Comparing the results, with respect to the measurements of previous years, DNBA complies with these legal limits of the Sant Fruitós de Bages acoustic map:

A3 - Cabin located in a rural environment:



The noise received by the isolated cabin, Mas Casagemas, at night is seen to have decreased compared with previous years.

For some time, all new installations built in the DNBA roof sector (closer to the cabin) have been soundproofed.

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5.8 Wastes

During FY2021, in the process of production and auxiliary activities will produce about **1.186,67 Tons** of waste.

DENSO BARCELONA, S.A.U has the Wastes Productor code **P 10335-1**. The most representative forms are:

WASTE	CODE		TREAT. 2018		2019		2020		2021	
WASTE			tn	tn/M€	tn	tn/M€	tn	tn/M€	tn	tn/M€
Banal waste (CSR)	200199	T12	26,66	0,08	21,98	0,06	32,16	0,10	20,94	0,06
Paper and cardboard	200101	V11	396,65	1,12	388,93	1,05	347,03	1,04	363,08	1,03
Wood	150103/200138	V15	182,12	0,52	264,53	0,71	186,43	0,56	179,46	0,51
Slag Sn/Pb	100401/160303	V41	0,30	0,00	0,37	0,00	0,17	0,00	0,09	0,00
Slag Sn/Ag	100809/160304	V41	5,34	0,02	5,85	0,02	5,13	0,02	6,05	0,02
Waste metal	200140/120103/160214/160216/120113	V41	206,20	0,58	150,69	0,41	97,13	0,29	150,94	0,43
Solvents and other organic substances	140603	V21	3,99	0,01	3,11	0,01	2,24	0,01	3,59	0,01
Empty drums	150110/160304/150104	V51	9,56	0,03	8,60	0,02	8,43	0,03	8,36	0,02
Plastic	200139/120105/150102	V12	367,60	1,04	466,12	1,26	407,34	1,22	410,02	1,17
Light containers	150105	V12	5,87	0,02	5,30	0,01	2,26	0,01	4,42	0,01
Contaminated absorbents	150202	T21	22,91	0,06	17,54	0,05	11,59	0,03	13,28	0,04
Aqueous liquids containing dangerous substances	161001/120109	T31	5,17	0,01	5,24	0,01	3,88	0,01	6,98	0,02
Drill waste	120109	T31	9,22	8,86	9,32	7,59	5,86	4,89	10,48	6,44
Silicona	080409	V21			5,82	0,02	8,11	0,02	8,98	0,03

Ordinary waste that ends up in the landfill or for energy recovery was reduced thanks to the different improvement activities to ensure that not so much waste was generated due to the COVID-19 pandemic.

There is generally a slight increase in the waste generated due to the recovery of production during FY2021.

Of all the waste generated, **95.6% is reused** and only **4.4% is treated**. This considerably reduces the environmental impact of DNBA's activity.

5.9 Light pollution

Light pollution in the exterior facilities in DNBA (parking lot and building facade) are under the light pollution prevention laws. As a prevention, DNBA carried out a report regarding the fulfillment of the RD 1890/2008 Law. It lead to the conclusion that obey the regulations regarding the features of the facilities, the kind of lights which are used and the energy efficiency.

5.10 Other factors related to the environmental performance

5.10.1 Emergency Plan

DNBA has an Emergency Plan and associated instructions that enable us to identify, respond to and prevent environmental accidents and larger-scale emergencies such as fires. Periodically, drills are carried out to check their effectiveness.

5.10.2 Communications and complaints

In order to maintain open relations with society, DNBA has a system to receive and respond to any complaint or request for information related to the environmental aspects of the company.



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5.11 BASIC ENVIRONMENTAL BEHAVIOUR INDICATORS according to the total annual production (expressed as gross added value*)

During the FY2021 the gross Added Value (difference between the amount produced and the material costs) has been 169,2 M€.

BASIC INDICATOR	UNITS	FY 2018	FY2019	FY2020	FY2021
Water.	m³/M€.	63	55	41	56
Energy Efficiency.	MWh produced with renewables/Mwh consumed.	0,03	0,06	0,06	0,07
	MWh/M€ Natural Gas.	31,29	25,72	23,98	24,68
Total Greenhouse Effect Gas Emissions.	Tn/M€.	33,07	27,85	3,59	3,70
Efficiency in the consumption of materials.	Tn/M€.	2,1	1,9	1,7	2,3
Total Waste.	Tn/M€.	8,5	7,8	6,8	7,0
Hazardous Waste.	Tn/M€.	0,4	0,3	0,2	0,3
Non-Hazardous Waste.	Tn/M€.	8,1	7,5	6,5	6,7
Waste intended for Re- use.	Tn/M€.	8,1	7,5	6,4	6,7
Waste intended for Treatment.	Tn/M€.	0,4	0,3	0,3	0,3
Total Emissions (COV).	Kg/M€.	2,9	5,8	10,3	10,6
Total Emissions (PST).	Kg/M€.	1,1	0,6	0,6	0,7
Biodiversity.	m²/M€.	316	267	279	273



* Gross added value: Amount Produced – Costs of material

6.1 Participation

There are several tools to promotion the staff participation in development of environmental initiatives realized in DNBA. Below are some examples of communication channels used:

1. Internal improvement request application (SAMI)

SAMI system is based on the consideration that the operators know best what are the problems associated with their work. Therefore, intended to promote the participation of all people in the company to exploit the improvement opportunities that these proposed. One of the affected parameters is the environment (improvements in reducing energy, raw materials used, recycling, etc.).

In FY2021, a total of **13 environmental SAMIS and 14 energy efficiency SAMIS** were performed. We give an example of a SAMI carried out below:

Nombre: Gabriel Aros Re	one Nº. Empleado: 2024 Se	ección de Origen: Die Costina
	L SAMI: C. BIMESTRAL tema: QED 3-3 Curso KAIZEN e DENSO SPIRIT Pasar directamente a	QCC Otros
ACTUAL: En Die Castim Temennos dos línes de luces para ilumin Te sección, en una esta la Vinea I de Die Casting 3 en p Ota Denda Stocs. de Productos acabidos.	ACCIÓN DE LA MEJORA:	
NO ADMITIDO (veleccionar motivo -No hay mejora. Mejora ineficiente. -Mejora ya realizada, concepto repetiti -za una reparación o ca mal estado o identificado: ecliptens, cinta, botoner ARÁMETRO AFECTADO: Seg 58 Coste Energía Coste	Ivo. E - Cambio en que se F - Mejora ecconómic G - Mejora innecesari H - Otros:	generó la mejora. amente no viable.
ECCIÓN QUE APLICARÁ: Ka Sección de Origen 🕅 P.E. PCR nº:	aizen Team CON Requisición Hecha nº:	[]
	s de un 10% 2 \rightarrow rial/energía 2 \rightarrow X ar de trabajo 3 \rightarrow 0 con un CR 3 \rightarrow X 0 euros/mes 3 \rightarrow X	
Todas las ideas deben llevar la valoración del J.E. y/o ENC. Se darà como válida la valoración dada por la categoria superior.	SUMA TOTAL G A B Si A & B < 3 no se admite Si A & B < 7 pasar a SV Si C ≥ 7 parar a Manager	D Anotar sólo si está APLICADO:
Nombre y Firma	Togo 8 mil	



SAMI for improving energy efficiency and reducing the energy consumed in lighting the DIE CASTING section.

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Inefficient Consumption

Energy Saving



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2. Environmental and Energy Committee

The Environmental and Energy Committee is composed by:



Meets every three months and aims to:

- 1. To inform and argue about the environmental and energy activities.
- 2. To decide the environmental and energy targets of DNBA.
- 3. To revise the environmental and energy index.

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6.2 Communication and Education

Different communications and education actions were made in FY2021 to raise the awareness of our workers with regards to the environment (activities to reduce water and energy consumption, to inform on the segregation of waste, to inform on the environmental audits and their results, Activities on DNBA decarbonization to be a CO2 Neutral company, etc.).

These communications were made through the **Últimas Noticias** (written articles), **Weekly President Message**, **Monthly Bulletin**, **Denso Connection** or **videos** played in the rest area. We give a few examples below:



Alcances 1, 2 y 3 del Protocolo de Gases de Efecto Invernadero (Fuente: Protocolo de Gases de Efecto Invernadero)

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Denso Barcelona, S.A.U obey all Environmental Legal Requirements. Every day is realized a control in order to detect the New Environmental Rules and modifications. Every year the Legal Compliment is evaluated.

LEGAL REQUIREMENT	RULES
	Orden de 18 de octubre de 1976 de Prevención y corrección de la Contaminación Atmosférica.
	Ley 34/2007 de la Calidad del aire y protección de la Atmósfera.
	RD 117/2003 sobre la limitación de emisiones de COV's.
Atmospheric emissions	Reglamento (UE) nº 517/2014 Sobre los gases fluorados de efecto invernadero.
Atmospheric emissions	RD 100/2011 por el que se actualiza el catálogo de actividades potencialmente contaminadoras de la atmósfera y se establecen las
	disposiciones básicas para su aplicación.
	Decreto 139/2018 sobre los regímenes de intervención ambiental atmosférica de los establecimientos donde se desarrollen actividades
	potencialmente contaminadoras de la atmósfera.
	RD 1/2001 por el cual se aprueba el texto refundido de la ley de aguas.
Water	Ordenanza de Vertido de Aguas residuales de la Mancomunitat de Municipis del Bages pel sanejament.
	RD 3/2003 por el que se aprueba el texto refundido de la legislación de aguas en Cataluña.
	Decreto 93/99 de Procedimiento de Gestión de Residuos.
	Ley 22/2011 de Residuos y suelos contaminados.
Wastes	Decreto Ley 1/2009 por el cual se aprueba el texto refundido de la ley reguladora de residuos.
	RD 553/2020 Regulación del traslado de residuos en el interior del Territorio del Estado.
	Directiva 2008/98/EC sobre los residuos y por la que se derogan determinadas Directivas.
	RD 379/2001 sobre Reglamentación de almacenamiento de productos guímicos peligrosos.
	RD 105/2010 que modifica el RD 379/2001.
D	RD 551/2006 por el que se regula el transporte ADR.
Dangerous products	Reglamento CE 1272/2008 sobre Clasificación, etiquetado y envasado de sustancias y mezclas.
	Directiva 2000/53 sobre los vehículos al final de su vida útil (End Live Vehicle).
	Reglamento CE 1907/2006 relativo al registro, evaluación, autorización y reestricción de las sustancias y preparados químicos.
	Mapa Acústico de Sant Fruitós de Bages.
	Ley 20/2009 de Prevención i control ambiental de las actividades.
	Decreto 176/2009 por el que se aprueba el Reglamento de la Ley 16/2002, de protección contra la contaminación acústica, y se
Noise and vibration	adaptan sus anexos.
	Decreto 60/2015 sobre las entidades colaboradoras de medioambiente.
	Ordenanza Reguladora de Ruido y Vibraciones de Sant Fruitós de Bages.
	Real Decreto 1890/2008 sobre Eficiencia Energética en instalaciones de alumbrado exterior y sus instrucciones técnicas
	complementarias.
Light pollution	Decreto 190/2015, de desarrollo de la Ley 6/2001, de ordenación ambiental del alumbrado para la protección del medio nocturno
	Ley 6/2001 de ordenación ambiental del alumbrado para la protección del medio nocturno.
Environmental License	Ley de Intervención Integral de la Administración Ambiental (IIAA).
	Ley 20/2009 de Prevención i control ambiental de las actividades.
Energy Efficiency	Ley 20/2009 de Prevención i control ambiental de las actividades.
	RD 56/2016 por el que se transpone la Directiva 2012/27/UE del Parlamento Europeo y del Consejo, relativa a la eficiencia energética,
	en lo referente a auditorías energéticas, acreditación de proveedores de servicios y auditores energéticos y promoción de la eficiencia
	del suministro de energía. DD 200/2021 Delativa a la Castificación de la Eficiencia Energetica de las adificios
	RD 390/2021 Relativa a la Certificación de la Eficiencia Energetica de los edificios.

The present Statement has been prepared according to the EMAS Regulation (UE) 2017/1505. The years correspond to the period from April to March (fiscal year). This document is for public access and the Environmental Committee is responsible for updating and modifying it.

The next Environmental Statement will be issued during second half of the year 2023, the data related to the period April 2022 - March 2023 will be included. The verified version of this document is the English one. It had a one-year validity from the verification date. This statement hasn't got any value if this isn't validated by an accredited entity.

Name and accreditation number: Josep Pla, Lloyd's Register Quality Assurance, ES-V-0015.



This statement, as well as other available information related to the activities of the DENSO group at: DENSO EUROPE: https://www.denso.com/es/es/about-us/company-information/dnba/ EMAS: http://www.emas.cat/



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Generalitat de Catalunya Departament de Territori I Sostenibilitat	

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Global supplier of automotive technology, systems and components.