ENVIRONMENTAL STATEMENT

2024

ECOPORT
Autoridad Portuaria de Valencia

valenciaport
Autoridad Portuaria de Valencia

CONTENTS

1. INTRODUCTION AND SUSTAINABILITY STRATEGY OF THE PORT AUTHORITY OF VALENCIA: LETTER FROM THE PRESIDENT

In a global context marked by climate emergency, energy transition and the need for more responsible development models, the Port Authority of Valencia reaffirms its commitment to sustainability as a transversal axis of its strategical approach. This EMAS 2024 Environmental Statement not only reflects the technical and operational progress achieved, but also the strong commitment to lead, from the port area, a transition engaging each and every one of us.

Introduction and environmental sustainability strategy of the Port Authority

Sustainability and climate action are two fundamental cornerstones of the management strategy of the Port Authority of Valencia (PAV). In the 2024 financial year, Valenciaport has reaffirmed its commitment to the decarbonisation of the port system and adaptation to climate change, integrating environmental sustainability as a transversal axis in all its lines of action. This shared vision is only possible thanks to the active involvement of the Port community of the ports of Valencia, Sagunto and Gandia, which is moving decisively towards a more efficient and environmentally friendly energy model.

In recent years, the Port Authority of Valencia has given a major boost to the green hydrogen project, consolidating its position as a reference in energy innovation. These pilot initiatives, pioneered in European ports, have enabled the development of port machinery that uses hydrogen as a clean fuel in real logistics operations.

The roadmap towards zero emissions - presented in the Net Zero Plan - continues to make steady progress, with initiatives in technological innovation, energy transition and environmental monitoring and tracking.

In this context, the work on the OPS (Onshore Power Supply) installations at the Costa and Trasmed quays represents a decisive step towards the goal of electrification of quays and the reduction of atmospheric emissions from maritime traffic. These infrastructures will allow ships to connect to the on-shore power grid while berthed in the port, removing the need to keep their auxiliary engines active and contributing significantly to the improvement of air quality, with commissioning scheduled for July 2026.

At the same time, the tender for the new electrical substation in the port of Valencia has been launched; this will be an essential infrastructure for expanding the OPS system and advancing towards the decarbonisation goals. This investment represents a strong commitment to a more sustainable and energy-efficient port. In addition, the photovoltaic plant at the Valencia Terminal Europa silo has been commissioned, a solid step towards the energy self-sufficiency of the port precinct. This installation makes it possible to use solar energy intended for self-consumption, reducing dependence on external sources and their associated emissions. With this installation, plus the one already in operation on the breakwater of the Príncipe Felipe Quay, it is expected that approximately 18% of the current power use of the ports of Valencia, Sagunto and Gandía will be obtained through self-consumption.

On the other hand, the Port Authority of Valencia continues to promote a model of responsible environmental management, with the guiding principle of continuous improvement. This commitment is translated into a systematic and rigorous monitoring of the main environmental aspects: air quality, water discharge control, noise emissions, waste management and use of natural resources. Constant monitoring of these indicators makes it possible to establish preventive and corrective measures, thus ensuring a constant improvement in the environmental quality of the port area.

The PAV's commitment is backed up by a solid system of environmental certifications -ISO 14001, EMAS, PERS and ISO 50001- which endorses the effectiveness of the management model implemented and reinforces public confidence in our work. Furthermore, active collaboration with international organizations such as ESPO and WPCAP allows us to share best practices and align our strategies with the global challenges of climate change and energy transition.

Therefore, the Port Authority of Valencia's environmental sustainability strategy consists on a firm commitment in the short, medium and long term. This strategy is not only focused on achieving carbon neutrality, but also on preserving the natural environment and giving a boost to the competitiveness of the port-logistics system, by committing to multimodality and sustainable and resilient logistics chains.

Sustainability is not just an ethical or regulatory obligation: it is both the lever that allows us to move forward with a long-term vision and the tool that unites us. Together we go further.

MAR CHAO
President of the Port Authority of Valencia

2. 2 INTRODUCTION: BACKGROUND

The Port Authority of Valencia has been using sustainability criteria as a fundamental axis in the development of its business strategy for years . Within this framework, it has defined its main lines of action with the objective of advancing in its three ports towards emission-free ports by 2030, integrating commitments established in its Environmental and Energy Policy within a global approach of Corporate Social Responsibility (CSR). In addition, the PAV has promoted several initiatives aimed at achieving this goal and strengthening its alignment with the Sustainable Development Goals (SDGs) promoted by the United Nations.

However, this transformation has been made possible by the progressive achievement of a number of key milestones.

In 1998, the PAV launched the ECOPORT Project: Towards an Environmentally Friendly Port Community, which was financed by the European Commission's LIFE Programme. The outcome of this work was the drafting of a Methodology for the Implementation of Environmental Management Systems in Port Facilities. This methodology has become a national and international reference in port environmental management. ECOPORT laid the foundations for the development of the organisation's Environmental Management System, the development and operation of which is described here . In addition, as early as 1998, the PAV provided the organisation with specialised staff dedicated to environmental protection.

On 12 April 2000, the Board of Directors of the PAV approved the Environmental Policy, which has been subsequently reviewed and last updated on 11 November 2016. Over those years, the PAV has extended its commitment to environmental management, as the Environmental Management System has evolved to adapt to new challenges.

In 2003, the PAV was the first Spanish port to obtain the PERS (Port Environmental Review) Certification, granted by the Lloyd's Register and supported by the ECOPORTS Foundation and the European Sea Ports Organisations, ESPO.

In 2006, the EMS of the PVA was certified in accordance with Standard ISO 14001 and in 2008 was registered on the EMAS register of the Region of Valencia, the first Spanish port to obtain that certification.

In this same year, the Port Authority of Valencia received the Eco-excellent Company award at Ecofira, proposed by the Clean Technologies Centre (CTL) of the Regional Ministry of the Environment, Territory and Housing of Valencia, acknowledging its committment to sustainability.

The Port Authority of Valencia has also subscribed a series of international commitments of a voluntary nature, including the Sydney Declaration for the Sustainable Development of Port Cities, under the auspices of the International Association of Cities and Ports (november 2006) and the "World Ports for a Better Climate Declaration" signed in in Rotterdam in July 2008.

In its continuous effort for environmental improvement and the reduction of greenhouse gases, the PAV calculates and registers the Carbon Footprint of the Port of the Valencia on the Carbon Footprint, and CO2 Compensation and Absorption Projects Register created by the Ministry of Agriculture, Food and the Environment, obtaining the "calculation" seal. Along these lines, in 2016, the organization obtained the certification of the Energy Management System in accordance with standard ISO 50001, integrating both environmental and energy policies in a single Environmental and Energy Policy.

Consequently, and as a continuation of this line, the Port Authority of Valencia continues to work on many initiatives in relation to the environment, energy and the fight against climate change, taking an active role in different R&D projects with the aim of environmentally improving the performance of activities and to act as a catalyst for the companies that form part of our Port Community. Among these actions, we can highlight:

- **Improvement of control tools and policies and measuring the principal environmental aspects arising from port activity in the ports it manages, along with energy and water consumption, and other resources.**
- **Progressive replacement of vehicles by others with better environmental performance, as well as the renovation of lighting in buildings and roads through the installation of more energy-efficient ones.**
- **Environmental monitoring by means of the Environmental Monitoring Plan, intended to control the effects of the environmental issues generated by the extension works at the ports of Valencia and Sagunto.**
- **Creation of the ECOPORT III project, an evolution of ECOPORT II, created with the aim of measuring the levels of eco-efficiency within the Valenciaport community and establishing the strategy to improve its energy-environmental performance through the definition of indicators like the carbon footprint.**
- **Maintenance of the Environmental and Energy Management System, ensuring efficient management of resources while improving the information contained in this Statement year after year and enabling continued improvement environmental and energy performance over time.**
- **Driving the the implementation of renewable energies on port premises with the goal of decarbonising activities carried out therein and reducing the carbon footprint.**
- **Development of the "Zero-Emissions Plan" in the port of Valencia, with the aim of achieving a carbon-neutral port model.**
- **Registration and updating of the Carbon Footprint in the Registry of the Ministry for Energy Transition and the Demographic Challenge, having obtained the Reduzco certification, which recognises progress**

3. DESCRIPTION OF THE PORT

in reducing greenhouse gas emissions, in 2019.

The Port Authority of Valencia (PAV), trading as Valenciaport, is the public body responsible for the management of the three state ports located on an 80-kilometre stretch of Spain's Mediterranean east coast: Sagunto, Valencia, and Gandía.

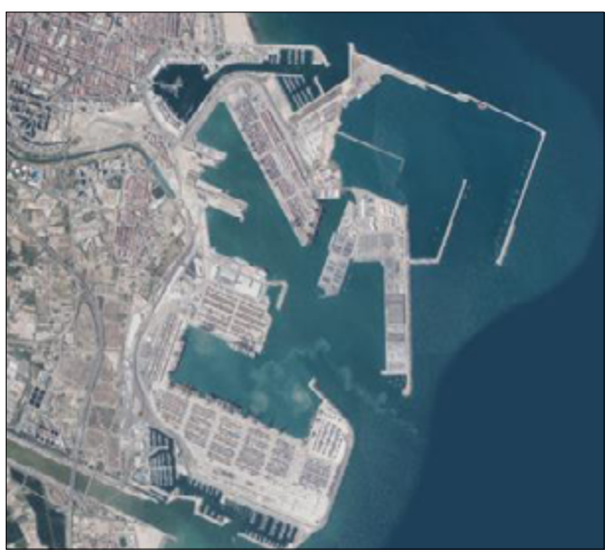
The prime geo-strategic location of Valenciaport in the centre of the Western Mediterranean Arch, in line with the east-west corridor that crosses the Suez Canal and the Straits of Gibraltar, positions Valenciaport as the first and last call for the principal shipping companies operating regular lines between America, the Mediterranean Basin and the Far East.

/ 3.1 Location. Physical Data

PORT	STATUS	TOTAL SURFACE AREA	WASTER SURFACE AREA	PIERS BERTHING LINE
SAGUNTO	LONGITUDE 0º 13' W LATITUDE 39º 39' N	2,397,800 M²	2,206,000 M²	14 QUAYS 5,801 M BERTHING LINE
VALENCIA	LONGITUDE 0º 18.1' W LATITUDE 39º 26.9' N	5,626,534 M²	5,985,000 M²	27 QUAYS 13,554 M BERTHING LINE
GANDÍA	LONGITUDE 0º 9' W LATITUDE 38º 59' N	245,000 M²	284,000 M²	6 QUAYS 1,573 M BERTHING LINE

(*) The coordinates refer to the lighthouse located between the confluence of the North and East breakwaters.

Port of Sagunto 2023



Port of Valencia 2023

Port of Gandía 2023

The ports of Sagunto, Valencia, and Gandía are located on the Iberian Mediterranean side, with a subtropical Mediterranean climate of moderate winters and rather hot summers.

/ 3.2 Legal framework

The legal regime of the Port Authorities is described in Royal Decree 2/2011, of 5 September, approving the revised text of the Law on State Ports and the Merchant Navy.

The Port Authority of Valencia is a Public Law entity with its own status and equity, independent of the State, reporting to Puertos del Estado, a public organization responsible for the administration, management, control and operation of the ports of Sagunto, Valencia, and Gandía, among others. Its principal functions are governing and managing the public port domain; granting of concessions and authorisations; planning, designing and bulding ant necessary works, monitoring and policing within the service area of the ports and maintainng signals to assist navigation, among others.

The law grants exclusive competency for the Ports of General Interest to the General State Administration (Art.149.1. 20 of the Constitution) and establishes the designation of the government bodies of the Port Authorities to the Autonomous Communities. The bodies of the Port Authority of Valencia are the following:

a) Governance:
- Board of Directors
- President

b) Management:
- Manager

c) Assistance
- Navigation and Port Committee

In relation to legal action, the Port Authority of Valencia has a regular identification and assessment system of legal requirements and other requirements of an environmental nature. Thus, compliance, among others, of the update of pertinent authorisations in environmental matters, and environmental obligations of an ad hoc nature.

The PVA considers that compliance with current legislation, and environmental legislation especially is essential. It complies with environmental requirements in all areas such as:

Clock Building

- **Waste: Through the control of the production of hazardous and non-hazardous waste, and appropriate storage, labelling, separation, transport and management of waste using duly authorised transporters and managers.**
- **Emissions: with the corresponding vehicle inspection control logs as well as control of other types of emissions such as those generated by the existing boiler.**
- **Discharges, although not a significant factor as existing discharges at the facilities are of household waste (from toilets and showers installed and controlled by the organisation).**
- **Noise, periodic measurements are used to demonstrate compliance with legal requirements.**

Similarly, as reflected in the Environmental and Energy Policy, the PAV is committed to complying with the legal environmental, energy and other applicable requirements, promoting compliance among the staff of the Port Authority itself and the concessions located in the port area through training activities.

Among the main environmental authorisations and obligations, we should highlight the following:

- **Registration as Small Hazardous Waste Producer No. 3631/P02/RP/CV**
- **Registration as a Waste Holder in the Port of Valencia No. 363/P05/CV**
- **Registration as a Waste Holder in the Port of Gandía No. 364/P05/CV**
- **Registration as a Waste Holder in the Port of Sagunto No. 365/P05/CV**
- **Plan for reception and handling of waste from ships**
- **Inland Maritime Plan**
- **Authorisation for discharge of water from the air-conditioning plant in the Port of Valencia into the maritime-terrestrial public domain (VERMAR 217)**
- **Permit to discharge into the municipal sewage network of Valencia (RES. 118-R)**

/ 3.3 Basic port traffic data

MAGNITUDES BÁSICAS DE TRÁFICO APV. Datos acumulados.

Diciembre 2024

		2023	2024	Dif.24/23	Δ24/23	Δ24/23 mes ant	Evolución 24/23
TOTAL TRÁFICO (t) (1+2) (1)		76.746.424	80.666.175	3.919.751	5,11%	4,63%	
(Toneladas)							
1. TOTAL GRANEL		7.762.519	6.204.346	-1.558.173	-20,07%	-22,99%	
	Líquido	5.296.951	3.442.040	-1.854.911	-35,02%	-39,19%	
	Sólido	2.465.568	2.762.306	296.738	12,04%	12,48%	
2. TOTAL MERC. GRAL.		68.983.905	74.461.829	5.477.924	7,94%	7,85%	
	No containerizada	15.310.254	15.645.129	334.875	2,19%	1,66%	
	Containerizada	53.673.651	58.816.700	5.143.049	9,58%	9,64%	
BUQUES.:	NÚMERO	7.575	7.437	-138	-1,82%	-2,12%	
	G.T.	302.475.851	302.259.213	-216.638	-0,07%	-0,41%	
ESTRUCTURA DEL TRÁFICO (t)		76.746.424	80.666.175	3.919.751	5,11%	4,63%	
	Carga / Descarga	46.365.309	46.107.020	-258.289	-0,56%	-1,39%	
	Carga	23.720.684	23.650.877	-69.807	-0,29%	-0,50%	
	Descarga	22.644.625	22.456.143	-188.482	-0,83%	-2,30%	
	Tránsito Marítimo	30.381.115	34.559.155	4.178.040	13,75%	14,04%	
CONTENEDORES (TEU)		4.796.985	5.475.773	678.788	14,15%	14,05%	
	Llenos	3.656.202	4.113.041	456.839	12,49%	12,46%	
	Carga	870.031	871.176	1.145	0,13%	0,32%	
	Descarga	823.003	910.265	87.262	10,60%	10,43%	
	Tránsito	1.963.168	2.331.600	368.432	18,77%	18,74%	
	Vacíos	1.140.783	1.362.732	221.949	19,46%	19,12%	
	Carga	344.863	471.040	126.177	36,59%	32,73%	
	Descarga	410.678	467.566	56.888	13,85%	14,12%	
	Tránsito	385.242	424.126	38.884	10,09%	12,10%	
PASAJEROS LÍNEA REGULAR Y CRUCEROS							
	Total pasajeros	1.558.180	1.606.382	48.202	3,09%	3,41%	
	Línea regular	776.900	832.315	55.415	7,13%	7,24%	
	Cruceros	781.280	774.067	-7.213	-0,92%	-0,23%	
VEHÍCULOS EN REG. DE MERCANCÍA RoRo (uds.)							
	Total	643.151	579.401	-63.750	-9,91%	-11,51%	

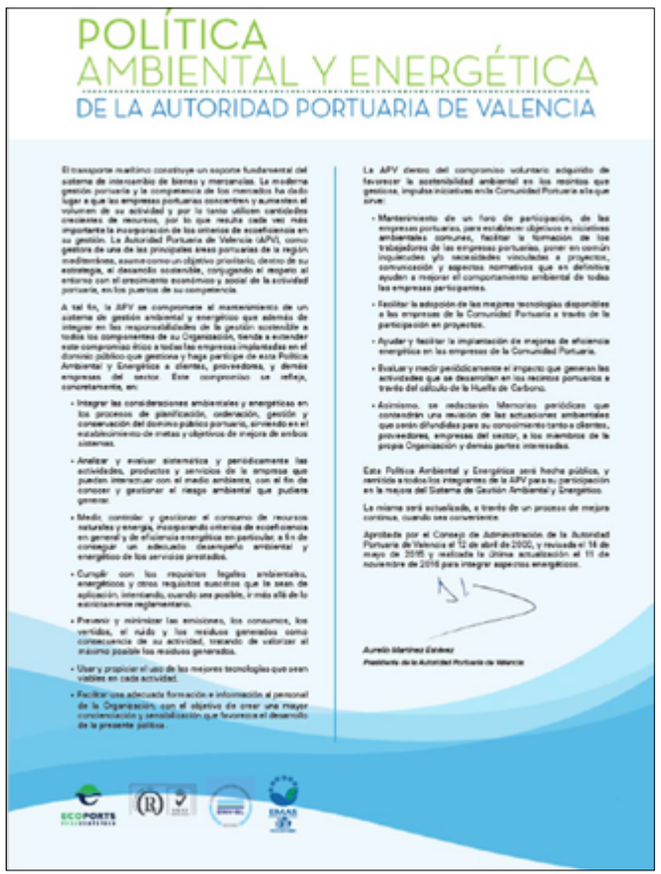
MAGNITUDES BÁSICAS DE TRÁFICO APV. Datos acumulados.

Diciembre 2024

	VALENCIA			GANDÍA			SAGUNTO			APV		
	2023	2024	Δ24/23	2023	2024	Δ24/23	2023	2024	Δ24/23	2023	2024	Δ24/23
TOTAL TRÁFICO (t) (1+2) (1)	**67.612.832**	**72.889.406**	**7,80%**	**194.472**	**166.715**	**-14,27%**	**8.939.120**	**7.610.054**	**-14,87%**	**76.746.424**	**80.666.175**	**5,11%**
(Toneladas)												
1. TOTAL GRANEL	3.277.155	2.971.408	-9,33%	4.136			4.481.228	3.232.938	-27,86%	7.762.519	6.204.346	-20,07%
Líquido	1.527.237	1.205.707	-21,05%				3.769.714	2.236.333	-40,68%	5.296.951	3.442.040	-35,02%
Sólido	1.749.918	1.765.701	0,90%	4.136			711.514	996.605	40,07%	2.465.568	2.762.306	12,04%
2. TOTAL MERC. GRAL.	**64.335.677**	**69.917.998**	**8,68%**	**190.336**	**166.715**	**-12,41%**	**4.457.892**	**4.377.116**	**-1,81%**	**68.983.905**	**74.461.829**	**7,94%**
No containerizado	11.179.056	11.601.315	3,78%	190.336	166.715	-12,41%	3.940.862	3.877.099	-1,62%	15.310.254	15.645.129	2,19%
Containerizada	53.156.621	58.316.683	9,71%				517.030	500.017	-3,29%	53.673.651	58.816.700	9,58%
BUQUES.: NÚMERO	**6.228**	**6.210**	**-0,29%**	**60**	**52**	**-13,33%**	**1.287**	**1.175**	**-8,70%**	**7.575**	**7.437**	**-1,82%**
G.T.	**270.724.573**	**276.567.203**	**2,16%**	**453.536**	**497.760**	**9,75%**	**31.297.742**	**25.194.250**	**-19,50%**	**302.475.851**	**302.259.213**	**-0,07%**
ESTRUCTURA DEL TRÁFICO (t)	**67.612.832**	**72.889.406**	**7,80%**	**194.472**	**166.715**	**-14,27%**	**8.939.120**	**7.610.054**	**-14,87%**	**76.746.424**	**80.666.175**	**5,11%**
Carga / Descarga	37.275.974	38.402.751	3,02%	194.472	166.715	-14,27%	8.894.863	7.537.554	-15,26%	46.365.309	46.107.020	-0,56%
Carga	21.007.014	21.210.173	0,97%	78.690	13.078	-83,38%	2.634.980	2.427.626	-7,87%	23.720.684	23.650.877	-0,29%
Descarga	16.268.960	17.192.578	5,68%	115.782	153.637	32,70%	6.259.883	5.109.928	-18,37%	22.644.625	22.456.143	-0,83%
Tránsito Marítimo	30.336.858	34.486.655	13,68%				44.257	72.500	63,82%	30.381.115	34.559.155	13,75%
CONTENEDORES (TEU)	**4.739.127**	**5.425.650**	**14,49%**	**0**	**0**		**57.858**	**50.123**	**-13,37%**	**4.796.985**	**5.475.773**	**14,15%**
Llenos	3.620.336	4.077.962	12,64%				35.866	35.079	-2,19%	3.656.202	4.113.041	12,49%
Carga	845.067	844.681	-0,05%				24.964	26.495	6,13%	870.031	871.176	0,13%
Descarga	812.610	901.692	10,96%				10.393	8.573	-17,51%	823.003	910.265	10,60%
Tránsito	1.962.659	2.331.589	18,80%				509	11	-97,84%	1.963.168	2.331.600	18,77%
Vacíos	1.118.791	1.347.688	20,46%				21.992	15.044	-31,59%	1.140.783	1.362.732	19,46%
Carga	341.267	469.915	37,70%				3.596	1.125	-68,72%	344.863	471.040	36,59%
Descarga	392.282	453.647	15,64%				18.396	13.919	-24,34%	410.678	467.566	13,85%
Tránsito	385.242	424.126	10,09%							385.242	424.126	10,09%
PASAJEROS LÍNEA REGULAR Y CRUCEROS												
Total pasajeros	1.558.180	1.606.382	3,09%	0	0		0	0		1.558.180	1.606.382	3,09%
Línea regular	776.900	832.315	7,13%	0	0		0	0		776.900	832.315	7,13%
Cruceros	781.280	774.067	-0,92%							781.280	774.067	-0,92%
VEHÍCULOS EN REG. DE MERCANCÍA RoRo (uds.)												
Total	**478.902**	**387.982**	**-18,99%**	**0**	**0**		**164.249**	**191.419**	**16,54%**	**643.151**	**579.401**	**-9,91%**

4. DESCRIPTION OF ENVIRONMENTAL MANAGEMENT SYSTEM

/ 4.1 Environmental policy



POLÍTICA AMBIENTAL Y ENERGÉTICA DE LA AUTORIDAD PORTUARIA DE VALENCIA

El transporte marítimo constituye un soporte fundamental del sistema de intercambio de bienes y mercancías. La moderna gestión portuaria y la competencia de los mercados ha dado lugar a que las empresas portuarias concentren y aumenten el volumen de su actividad y por lo tanto utilicen cantidades crecientes de recursos, por lo que resulta cada vez más importante la incorporación de los criterios de ecoeficiencia en su gestión. La Autoridad Portuaria de Valencia (APV), como gestora de una de las principales áreas portuarias de la región mediterránea, asume como un objetivo prioritario, dentro de su estrategia, el desarrollo sostenible, conjugando el respeto al entorno con el crecimiento económico y social de la actividad portuaria, en los puertos de su competencia.

A tal fin, la APV se compromete al mantenimiento de un sistema de gestión ambiental y energético que además de integrar en las responsabilidades de la gestión sostenible a todos los componentes de su Organización, tienda a extender este compromiso ético a todas las empresas implantadas en el dominio público que gestiona y haga partícipe de esta Política Ambiental y Energética a clientes, proveedores, y demás empresas del sector. Este compromiso se refleja, concretamente, en:

- Integrar las consideraciones ambientales y energéticas en los procesos de planificación, ordenación, gestión y conservación del dominio público portuario, sirviendo en el establecimiento de metas y objetivos de mejora de ambos sistemas.
- Analizar y evaluar sistemática y periódicamente las actividades, productos y servicios de la empresa que puedan interactuar con el medio ambiente, con el fin de conocer y gestionar el riesgo ambiental que pudiera generar.
- Medir, controlar y gestionar el consumo de recursos naturales y energía, incorporando criterios de ecoeficiencia en general y de eficiencia energética en particular, a fin de conseguir un adecuado desempeño ambiental y energético de los servicios prestados.
- Cumplir con los requisitos legales ambientales, energéticos y otros requisitos suscritos que le sean de aplicación, intentando, cuando sea posible, ir más allá de lo estrictamente reglamentario.
- Prevenir y minimizar las emisiones, los consumos, los vertidos, el ruido y los residuos generados como consecuencia de su actividad, tratando de valorizar al máximo posible los residuos generados.
- Usar y propiciar el uso de las mejores tecnologías que sean viables en cada actividad.
- Facilitar una adecuada formación e información al personal de la Organización, con el objetivo de crear una mayor concienciación y sensibilización que favorezca el desarrollo de la presente política.

La APV dentro del compromiso voluntario adquirido de favorecer la sostenibilidad ambiental en los recintos que gestiona, impulsa iniciativas en la Comunidad Portuaria a la que sirve:

- Mantenimiento de un foro de participación, de las empresas portuarias, para establecer objetivos e iniciativas ambientales comunes, facilitar la formación de los trabajadores de las empresas portuarias, poner en común inquietudes y/o necesidades vinculadas a proyectos, comunicación y aspectos normativos que en definitiva ayuden a mejorar el comportamiento ambiental de todas las empresas participantes.
- Facilitar la adopción de las mejores tecnologías disponibles a las empresas de la Comunidad Portuaria a través de la participación en proyectos.
- Ayudar y facilitar la implantación de mejoras de eficiencia energética en las empresas de la Comunidad Portuaria.
- Evaluar y medir periódicamente el impacto que generan las actividades que se desarrollan en los recintos portuarios a través del cálculo de la Huella de Carbono.
- Asimismo, se redactarán Memorias periódicas que contendrán una revisión de las actuaciones ambientales que serán difundidas para su conocimiento tanto a clientes, proveedores, empresas del sector, a los miembros de la propia Organización y demás partes interesadas.

Esta Política Ambiental y Energética será hecha pública, y remitida a todos los integrantes de la APV para su participación en la mejora del Sistema de Gestión Ambiental y Energético.

La misma será actualizada, a través de un proceso de mejora continua, cuando sea conveniente.

Aprobada por el Consejo de Administración de la Autoridad Portuaria de Valencia el 12 de abril de 2000, y revisada el 16 de mayo de 2005 y realizada la última actualización el 15 de noviembre de 2016 para integrar aspectos energéticos.

Aurelio Martínez Estévez
Presidente de la Autoridad Portuaria de Valencia

/ 4.2 Certificacions

CERTIFICATE OF VERIFICATION

ECOPORTS PERS CERTIFIED

THIS IS TO CERTIFY THAT THE DOCUMENTATION OF THE PORT ENVIRONMENTAL REVIEW SYSTEM OF:

Autoridad Portuaria de Valencia
Spain

HAS BEEN REVIEWED BY LLOYD'S REGISTER TO THE FOLLOWING ENVIRONMENTAL MANAGEMENT STANDARD:

Port Environmental Review System (PERS) version 5

THE SYSTEM IS APPLICABLE TO THE:

Activities, products and services of the port authority

Certificate no: 744
Verification date: 06.12.2022
Expiry date: 05.12.2024

ON BEHALF OF ESPO

ON BEHALF OF LRQA

ESPO

LRQA

A PERS certificate is the confirmation that the PERS requirements have been evaluated and met. However, because the review is based on third party information, a PERS certificate is not a value statement of the port environmental management system and its performance since these have not been evaluated on the basis of documents supplied to the port.

The Port Authority of Valencia is one of the entities certified through the PERS model (Port Environmental Review System)

Bureau Veritas Certification

Certificación

AUTORIDAD PORTUARIA DE VALENCIA

ISO 14001:2015

ENAC

Bureau Veritas Certification

Certificación

AUTORIDAD PORTUARIA DE VALENCIA

ENAC

Since 2006, the Port Authority of Valencia is certified under ISO 14001.

CERTIFICADO DE INSCRIPCIÓN

Registro de huella de carbono, compensación y proyectos de absorción de CO_2 del Ministerio para la Transición Ecológica y el Reto Demográfico

AUTORIDAD PORTUARIA DE VALENCIA - PUERTO DE VALENCIA

Año de cálculo 2019

Tipo de sello CALCULO Y REDUZCO

Alcances 1+2 y 3

Alcance 3 incluye empresas concesionarias, transporte por carretera en el recinto portuario y escalas de buques en el puerto.

Límites Se incluyen la actividad desarrollada en los edificios gestionados por la Autoridad Portuaria de Valencia (iluminación, fuerza y climatización) y la iluminación de viales del Puerto de Valencia.

Reducción 5,39 % de la media de la intensidad de emisión en el trienio 2017-2019 respecto del trienio 2016-2018, para el alcance 1+2 y 3.

CALCULO 2019 2

Valvanera Ulargui Aparicio
Directora General
Oficina Española de Cambio Climático
Ministerio para la Transición Ecológica y el Reto Demográfico

Fecha de inscripción 22/12/2021
Cód. huella de carbono 2021-a1766

Certificate of Registration in the Carbon Footprint Register of the Certificate of the Ministry of Ecological Transition for the year 2019

GENERALITAT VALENCIANA

EMAS

CERTIFICACIÓN

AUTORIDAD PORTUARIA DE VALENCIA

ha sido registrada[1] en fecha 15/01/2008, con el número:

ES-CV-000023

ALCANCE DEL SISTEMA DE GESTIÓN MEDIOAMBIENTAL:

GESTIÓN DE SERVICIOS E INFRAESTRUCTURAS EN LOS PUERTOS DE SAGUNTO, VALENCIA Y GANDIA

EMAS

Vicente Tejedo Torres
DIRECTOR GENERAL DE CALIDAD AMBIENTAL

[1] Reglamento (CE) nº 1221/2009 del Parlamento Europeo y del Consejo, de 25 de noviembre de 2009

From 15 January 2008, the Port Authority of Valencia was registered by the Regional Ministry of Infrastructure, Territory and the Environment under number ES-CV 000023 in compliance with the Regulation (EC) 1221/2009 and 761/2001

Bureau Veritas Certification

Certificación

Concedida a

AUTORIDAD PORTUARIA DE VALENCIA

AVDA. MUELLE DEL TURIA, S/N - 46024 - VALENCIA - ESPAÑA

Bureau Veritas Certification certifica que el Sistema de Gestión ha sido auditado y encontrado conforme con los requisitos de la norma:

NORMA

ISO 50001:2018

El Sistema de Gestión se aplica a:

GESTIÓN DE SERVICIOS E INFRAESTRUCTURAS DEL PUERTO DE VALENCIA.

Número del Certificado:	ES151899 - 1
Fecha de certificación inicial con otra Entidad de Certificación:	19-12-2018
Auditoría de certificación/renovación:	16-01-2025
Caducidad del ciclo anterior:	18-12-2024
Certificado en vigor:	29-04-2025
Caducidad del certificado:	18-12-2027

Este certificado está sujeto a los términos y condiciones generales y particulares de los servicios de certificación

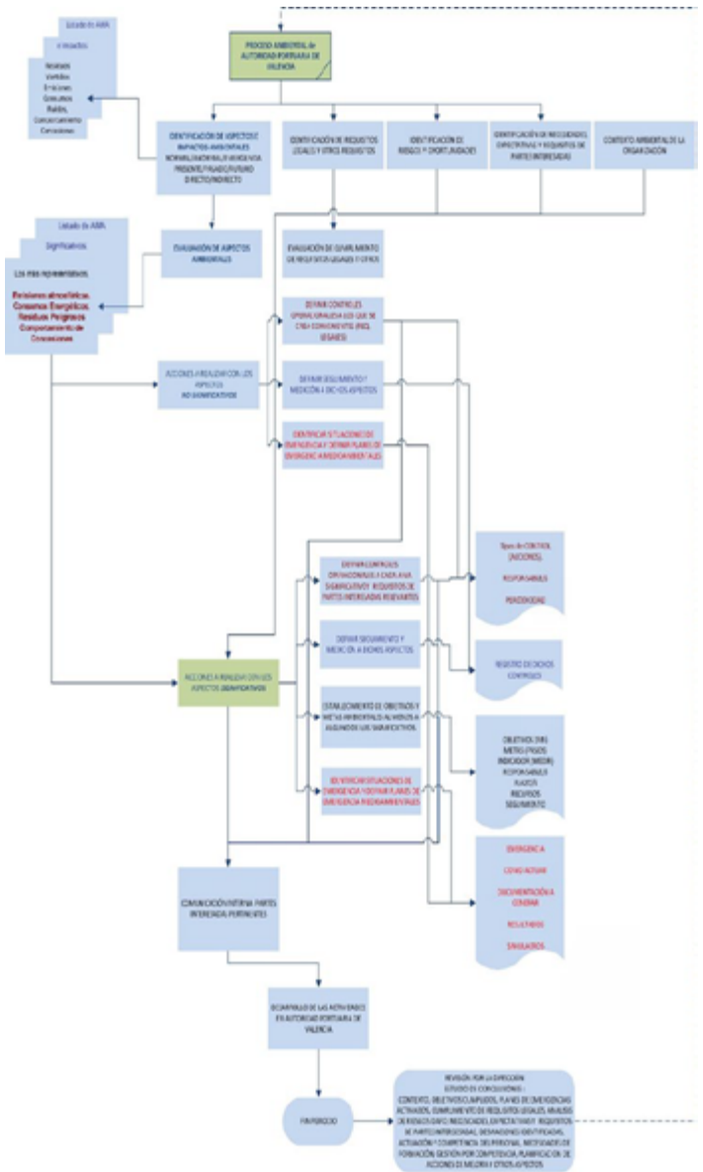
Bureau Veritas Iberia S.L.
C/ Valportillo Primera 22-24, 28108 Alcobendas - Madrid, España

ENAC

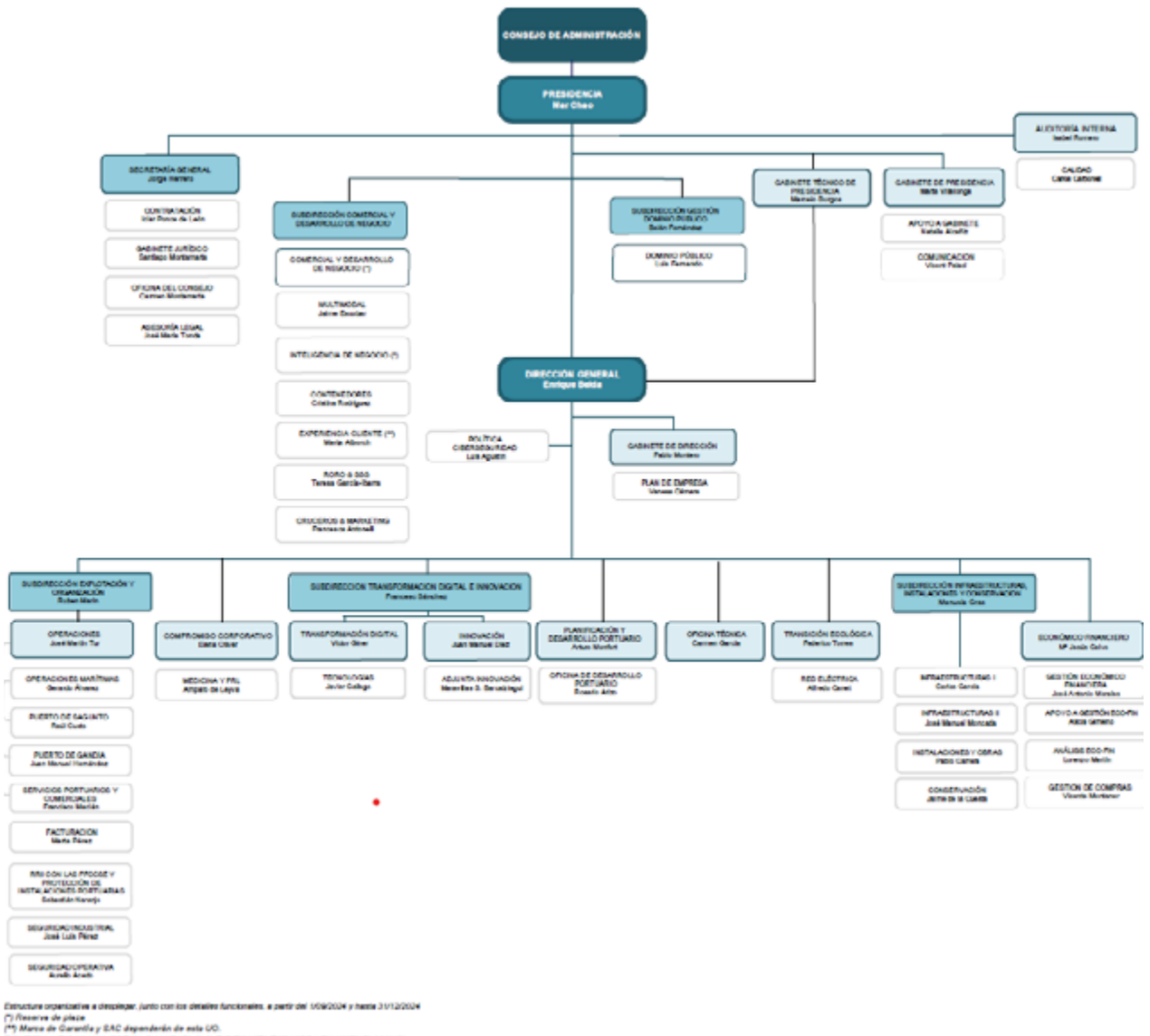
1/1

In 2016, the Port Authority of Valencia obtained ISO 50001 certification for the port of Valencia

/ 4.3. Description of the system



/ 4.4. Flow chart



Estructura organizativa a divulgar, junto con los detalles funcionales, a partir del 1/08/2024 y hasta 31/12/2024
(*) Reserva de plaza
(**) Marca de Garantía y EAC dependerán de esta UO.
Estadística y Gobernanza del Dato dependerán de la Subdirección Comercial y desarrollo de negocio.

Within the Management System, responsibilities are assigned as follows:

- **The Board of Directors is responsible for:**
  - Approving the environmental policy of the Port Authority of Valencia.

- **The General Manager is responsible for:**
  - Reviewing the Environmental and Energy Management System and approving the Review Act:

- **The Head of the Ecological Transition Area is responsible for:**
  - Reviewing/approving the documentation comprising the Environmental and Energy Management System and the goal and the Environmental and Energy Management Programme, prior to approval.
  - Ensuring that the Environmental and Energy Management System complies with the requirements of International Standards.
  - Reporting to senior management on the performance of the environmental management system, including environmental performance.
  - They shall be responsible for the creation of an energy management team.

- **The Environment Officer or the designated person shall be responsible for:**
  - Keeping the Environmental and Energy Management System and the documentation thereof up to date, proposing goals, targets and environmental programmes, verifying the corrective and preventive actions, and drafting the Auditing and Supervision Programme for the completion of environmental audits.
  - Identifying and assessing the environmental aspects arising form the activities and services of the Port Authority of Valencia, and the port facility for the purpose of focusing control on those that are significant.
  - Identifying the legal requirements and other requirements applicable to the Port Authority of Valencia in relation to the environment, and the verification of compliance.
  - Identifying possible accidents and emergency situations that may have environmental consequences and establishing the preventive measures and steps of action. Conducting, together with the Head of Integral Security, monitoring of the preventive measures established for each emergency situation through drills. Complying with the Emergency Report.
  - Managing the monitoring tasks, supervising compliance with environmental objectives of the Port Authority of Valencia, operational control operations regarding the management of discharges, waste, consumption of resources, noise and emissions to the atmosphere
  - Detecting the environmental training needs for personnel of the Port Authority of Valencia and collaborating with the Director of Human Resources in the drafting of the Position Files and the Environmental Training Programme.
  - Ensuring training of personnel who work in the name of the Port Authority of Valencia through the drafting and distribution of the Environmental Best Practice.
  - Proving continuous support and advice to the rest of Departments involved in environmental management.
  - Process the management of complaints from stakeholders relating to environmental aspects of the activities and services of the Port Authority of Valencia and the management of internal and external communications of environmental content.
  - Drafting the Report on the Review of the Environmental Management System.
  - In summary, ensuring that the environmental management system is established, implemented and maintained in accordance with the requirements of the standards and regulations and reporting to the senior management on the performance of the environmental management system, including the recommendations for improvements.

For any additional information, you may contact:

medioambiente@valenciaport.com

/ 4.5. Environmental aspects

The Environmental Management System of the Port Authority of Valencia includes a Procedure for the identification and assessment of Environmental aspects (PMA-03) which, from the perspective of the life cycle, establish the methodology to identify and assess the environmental aspects linked to activities and services, and those generated on the port premises, both directly and indirectly.

This procedure contemplates the identification of direct and indirect environmental aspects, in normal and abnormal operating conditions, as well as the detection of potential environmental aspects based on the analysis of accidents and emergency situations that have occurred in the past and on the assessment of the facilities and activities carried out.

It considers:

- **Direct environmental aspects: Element of activities, products and services of an organisation that may interact with the environment.**
- **Indirect environmental aspects: Generated as a consequence of the activities carried out and upon which the organisation does not have full control in management.**
- **Significant environmental aspects are the first to be taken into account when it comes to defining objectives and targets geared towards reducing those aspects.**
- **Environmental impact: Any change in the environment, adverse or beneficial, as a total or partial development of environmental aspects of an organisation.**
- **Normal conditions: The common or routine production conditions.**
- **Normal conditions: The conditions that, although controlled, are special, such as the maintenance, cleaning, start-up, shut-downs, etc.**
- **Emergency situations: Uncontrolled situations, which includes both incidents and accidents.**

For the assessment of the direct environmental aspects, the methodology used is summarised in accordance with the corresponding EMS procedure. Each of them are analysed separately, using the aforementioned methodology which uses the criteria of Frequency with which the environmental aspects are generated and the severity, which is determined by the calculation of the Danger and the Quality of the aspect.

The Frequency for each type of aspect is classified in accordance with three categories: Low, Medium and High. Both the Quantity and the Danger, which establishes the Severity, are classified as Low, Moderate, Medium and High. Those aspects evaluated with High Severity, regardless of frequency, shall be considered significant, as observed in the following table.

		SEVERITY			
		LOW	MODERATE	MEDIUM	HIGH
FREQUENCY	LOW				
	MEDIUM				
	HIGH				

For indirect environmental aspects, the Frequency criteria are used generating the environmental aspect and Consequences that assess the magnitude for each of the aspects identified. The Frequency is classified according to the category: Low, Medium and High and the Consequences are classified as: Low impact, Moderate impact and High impact.

Thus, those aspects whose consequences have a high impact or moderate impact with a High frequency, as shown in the following table.

		CONSEQUENCES		
		LOW IMPACT	MODERATE IMPACT	HIGH IMPACT
FREQUENCY	LOW			
	MEDIUM			
	HIGH			

In terms of the environmental aspects identified in emergency situation, they are assessed in accordance under the criteria Frequency, Impact and Sensitivity of the Environment are awarded scores defined in the methodology established in the EMS. The total score is thus obtained from the sum of the scores awarded for each criterion and for each aspect. Once all the aspects identified are assessed, a ranking is established in the

order of decreasing score. The 20% with the highest score are considered significant. Aspects not falling within this segment but with the same score as the last aspect considered significant will also be considered significant.

The possible aspects of the activities Port Authority of Valencia (PAV) may have for the environment, directly or indirectly, and the goals established in relation to them, are summarised in the following table:

DIRECT:	GOAL	INDIRECT	GOAL	POTENTIAL ENVIRONMENTAL IMPACT
WASTE GENERATION.		WASTE GENERATION ON THE PORT PREMISES		SOIL CONTAMINATION, ODOURS, LANDSCAPE DETERIORATION.
EMISSIONS TO THE ATMOSPHERE		EMISSIONS ARISING FROM PORT OPERATIONS ON THE PORT PREMISES	NO. 76	AIR POLLUTION AND CLIMATE CHANGE
WATER QUALITY		ENVIRONMENTAL PERFORMANCE OF CONCESSIONS		IMPACT TO BIODIVERSITY
NOISE, VISUAL IMPACT		NOISE ON ROADS ON THE PORT PREMISES		ALTERATIONS IN BIODIVERSITY AND PEOPLE
WATER CONSUMPTION		WATER CONSUMPTION ON THE PORT PREMISES		DEPLETION OF RESOURCES
POWER USE	NO. 79 NO. 82	ELECTRICITY CONSUMPTION ON THE PORT PREMISES	NO. 79 NO. 82	DEPLETION OF RESOURCES
USE OF RAW MATERIALS		USE OF RAW MATERIALS ON THE PORT PREMISES		DEPLETION OF RESOURCES

In addition to the environmental aspects described above, the environmental aspect "environmental performance of concessions" is established. The assessment criterion used is the percentage of concessions in the different levels defined in Ecoport.

Following the assessment criteria established in the "Procedure for the Identification and Assessment of Environmental Aspects" the significant environmental aspects are presented below.

SIGNIFICANT ASPECTS			
DIRECT:	**OBJ.**	**GOAL**	**INDIRECT**
POWER USE*	NO. 79 NO. 82	NO. 79 NO. 82	ENVIRONMENTAL PERFORMANCE OF CONCESSIONS

(*) The direct aspect "Power Use" is not significant in the Assessment due to use reduction and the fact that power is purchased from renewable sources. But it was decided to consider it significant to continue acting on the improvement of energy efficiency.

The list of aspects is reviewed every year, updating it where considered necessary.

Goals (see point 4.6) are established for the improvement of the main aspects and the significant aspects.

In the case of works of general interest, identifying and assessing the significance of the environmental aspects will be conducted in accordance with the an Environmental Impact Study, and they are monitored through the Environmental Impact Statement and the Environmental Monitoring Plan.

/ 4.6 Goals and targets

■ 4.6.1 Compliance with 2024 goals

The goals set forth and fulfilled in 2024 are differentiated by colour coding according to the legend described below and these were the following:

	Goal set in previous years and not completed.
	Goal set this year this but linked to another set in previous years.
	New goal set this year.

▸ **No. 59 Installation of a power substation at the Port of Valencia.**

The construction of the substation has been tendered and awarded, after obtaining the necessary permits.

The goal remains as envisaged for 2025.

▸ **No. 70 Improvement of energy efficiency through the implementation of photovoltaic panels in the facilities of the Puerto de Valencia and Gandía.**

Three photovoltaic installations have been executed as planned with funds from the Recovery and Resilience Mechanism (RRM):

- Photovoltaic plant at the Príncipe Felipe Quay: Once the project was awarded, the execution of the planned works was carried out.
- Photovoltaic plant at the Valencia Terminal Europa (VTE) Silo: Once the tendering project was completed, construction work has been executed during 2024.
- Gandía photovoltaic plant: once the bidding process was completed and the project awarded, work on the installation was carried out.

The goal has been achieved.

▸ **No. 76 Implementation of OPS (Onshore Power Supply) technology at the Port of Valencia.**

In the framework of the Port of Valencia's Zero Net Emissions Plan 2030, a ship electrification system is to be implemented. This system will allow the supply of electrical power from land to ships at berth, avoiding the use of their auxiliary engines during their stay in the port, thus contributing to the reduction of polluting emissions.

Thanks to the electrical capacity provided by the new substations, OPS connection points will be provided for cruise liners and ferries docked at the Poniente Transversal Quay (Passenger 1) and at the future Perfecto Palacio Quay in the port of Valencia (Passenger 2).

Installing two OPS supply points for commercial vessels, mainly container ships, which dock at the Costa Transversal Quay at the Port of Valencia, is also under consideration.

Both the Passengers 1 and Transversal Costa projects receive funding from the European Commission Recovery and Resilience Facility.

The Passengers 2 project will be implemented at a later stage.

Work has started on Tranversal Costa and Passengers 1 is scheduled to start in early 2025.

This goal remains being implemented in 2025, as planned.

▸ **No. 78 Drafting of detailed design for the connection to ST2 from the AQUA substation and connection between ST1 and ST2.**

Work has been done on drafting the necessary documents to bring the project to tender.

This goal remains being implemented in 2025 as planned.

▸ **No. 79 Installation of LED bulbs in all road lighting at the port of Gandía, with the aim of reducing electricity use by at least 15%.**

The goal of the project to replace the current sodium vapour lamps in the public streets of the Port of Gandía with LED lamps, which are more efficient and less polluting. It is currently out to tender.

This goal remains being implemented in 2025 as planned.

▸ No. 80 Establishment of a technological platform in the Port of Valencia to implement innovative solutions: implementation of wave energy and floating photovoltaic energy.

As part of the RENMARINAS project, the installation of a test platform for the connection, testing and discharge to the Port of Valencia electricity grid of marine renewable generation technology demonstrators is planned for the Port of Valencia.
Specifically, a floating photovoltaic platform will be installed in the port of Valencia and a wave-powered platform in the port of Sagunto.
The preparation of tender documents to carry out the installation project has been initiated.

This goal remains being implemented in 2025 as planned

▸ No. 81 Obtaining the Environmental Impact Statement for the installation of a wind farm in the port of Valencia.

Once the preliminary project has been submitted to the Regional Ministry, work is underway to obtain the EIS. The tender documents are being drawn up for the birdlife control, including the requirements made by the Regional Ministry.

This goal remains being implemented in 2025

▸ No. 82 Installation of a photovoltaic pilot plant on the North Extension breakwater (Renewport Project).

The VPA is working on the European Renewport project funded by INTERREG EURO MED funds. Its contribution consists of a vertical photovoltaic pilot installation in the port of Valencia. Work on the tendering of the project is under way.

This objective remains for 2025

■ 4.6.2 Objectives planned for 2025

The objectives planned for 2025 tackle the principal environmental aspects relating to PAV activities and the processes developed and that have implications of an environmental nature. The planned objectives are detailed below:

▸ No. 59 Installation of a substation at the Port of Valencia (ST1).

This objective is carried out in order to cover future forecasts of use and to be able to plan and improve the energy system in the Port of Valencia, which will allow, among other measures, the electrical connection to moored ships, thus reducing emissions as the use of fossil fuels (auxiliary engines) will be avoided by using electrical energy which, in the case of PAV, is 100% renewable.

- Starting situation: Provision of current information relating to the energy management of the Port of Valencia.
- Situation envisaged: Viable alternative actions to tackle the energy future of the port of Valencia.
- Result: Energy management of the port. Lines of the Policy: Integrate the environmental and energy considerations into planning processes, ordering, management and conservation of the port public domain, serving for the definition of targets and objectives of both systems..

▸ No. 76 Implementation of OPS technology at the Port of Valencia.

The aim is to carry out the necessary installations to implement an Onshore Power Supply (OPS) system that will allow vessels at berth to be connected to the electricity grid, which will enable the auxiliary engines to be disconnected and therefore reduce emissions and noise.

- Starting situation: participation in R&D&I projects on OPS development.
- Situation envisaged: to implement OPS technology within the port of Valencia.
- Result: reduction of emissions and noise produced by ships' engines during their stay in port. Lines of the Policy: Use and provide the use of technology improvements that are visible in each activity.

▸ No. 78 Installation of a connection between Substation 1 and Substation 2 at the Port of Valencia

This installation has been planned in order to provide the port with a redundancy system so that, in the event of a failure in one of the substations, the service necessary for port activity and services can be maintained.

- Starting situation: following the study of future demand, it was found that there was no supply capacity demanded in the medium term. Work began on the installation of the two substations.
- Expected situation: to be able to supply the energy demanded both to the port facilities and to the requested services, without service failures.
- Result: to increase the electrical capacity of the port of Valencia, and ensure supply in the event of failure of one of the substations. Lines of the Policy: To integrate the environmental and energy considerations into planning processes, ordering, management and conservation of the port public domain, serving for the definition of targets and objectives of both systems.

▸ No. 79 Installation of LED bulbs in all road lighting at the port of Gandía, with the aim of reducing electricity consumption by at least 15%

The aim is to make further progress in the reduction of energy consumption by switching the current lighting at the Port of Gandía to LED bulbs.

- Starting situation: The necessary control is available to ascertain consumption on roads and calculate savings.
- Situation envisaged: carry out actions necessary to reduce electricity consumption with respect to the previous year.
- Result: Improvement of energy efficiency. Lines of the Policy: Measuring, controlling and managing the use of natural resources and energy, incorporating eco-efficiency criteria in general and energy efficiency in particular, in order to achieve adequate environmental and energy performance of the services provided.

▸ No. 80 Establishment of a technological platform in the Port of Valencia to implement innovative solutions: implementation of wave energy and floating photovoltaic energy.

The goal is to implement innovative solutions in terms of new technologies that allow us to improve energy efficiency and the level of self-consumption

- Baseline: A Zero Emission Plan has been developed which aims to achieve net zero emissions by 2030 through the implementation of initiatives including new technologies.
- Situation envisaged: to create a technological platform that will allow us to incorporate the energy generated in a floating photovoltaic installation and a wave energy installation into the electricity grid.
- Result: improved energy efficiency and reduced emissions. Lines of the Policy: Use and provide the use of technology improvements that are visible in each activity.

▸ No. 81 GOAL: Obtaining the Environmental Impact Statement for the installation of the wind farm in the port of Valencia (Origin 2023)

This objective aims to implement a wind farm at the port of Valencia, executing the preliminary design of the wind farm for goal 73 completed in 2022.

- Starting situation: Preliminary design was completed for electrical installations in the Port of Valencia.
- Situation envisaged: obtaining the relevant permits to be able to implement the wind farm project.
- Result: To be able to implement the wind power project at the port of Valencia. Lines of the Policy: Use and provide the use of technology improvements that are visible in each activity.

▸ N 82 Installation of a photovoltaic pilot plant on the North Extension breakwater (Renewport Project)

The Port Authority of Valencia is working on a project with European funds for the installation of a pilot vertical photovoltaic system, which will be installed on the North Dock second breakwater.

- Baseline: A Zero Emission Plan has been developed which aims to achieve net zero emissions by 2030 through the implementation of initiatives including new technologies.
- Situation envisaged: to create a technological platform that will allow us to feed the energy generated in a floating photovoltaic installation and a wave energy installation into the electricity grid.
- Result: improved energy efficiency and reduced emissions. Lines of the Policy: Use and provide the use of technology improvements that are visible in each activity.

▸ No. 83 Implementation of an Environmental Management System

Given the relevance of the Energy Transition projects implemented by the APV, it is necessary to implement an Energy Management System, which will enable the following variables to be managed at all times

- Baseline: A Zero Emission Plan has been developed which aims to achieve net zero emissions by 2030 through the implementation of initiatives including new technologies.
- Situation envisaged: to create a technological platform that will allow us to incorporate the energy generated in a floating photovoltaic installation and a wave energy installation into the electricity grid.
- Result: improved energy efficiency and reduced emissions. Lines of the Policy: Use and provide the use of technology improvements that are visible in each activity.

/ 4.7 Needs and expectations of stakeholders

The identified needs and expectations of the stakeholders are detailed below:

PARTES INTERESADAS PERINENTES	NECESIDADES/ EXPECTATIVAS		REQUISITO	ACCIÓN
CLIENTES	NE	MANTENER LOS PRINCIPIOS DE PROTECCIÓN DEL MEDIO AMBIENTE Y MEJORA ENERGÉTICA	SI	SEGUIMIENTO SISTEMA DE GESTIÓN AMBIENTAL EMAS
CLIENTES	EX	DAR EL MEJOR SERVICIO AL MEJOR PRECIO MANTENIENDO CRITERIOS AMBIENTALES Y ENERGÉTICOS	NO	PUESTA A DISPOSICIÓN DE MEDIDAS Y MEDIOS AMBIENTALES
CLIENTES	EX	MANTENER EL CERTIFICADO DE GARANTÍA DE ORIGEN PROVENIENTE DE ENERGÍAS RENOVABLES DEL SUMINISTRO ELÉCTRICO	SI	INCLUSIÓN EN PLIEGO DE SUMINISTRO ELÉCTRICO
CLIENTES	EX	AUMENTAR CERTIFICACIONES/PROYECTOS PARA LA MEJORA EN MATERIA AMBIENTAL Y ENERGÉTICA	SÍ	PROMOCIÓN DE NUEVAS CERTIFICACIONES Y PROYECTOS DE INNOVACIÓN AMBIENTALES Y ENERGÉTICOS
PROVEEDORES	NE/EX	MANTENER LA POLÍTICA DE COMPRAS FORTALECIENDO EXIGENCIAS AMBIENTALES Y ENERGÉTICAS	SI	DEFINICION CRITERIOS AMBIENTALES. LEY CONTRATOS SECTOR PÚBLICO. EMAS, 14001, 140064, 50001
SUBCONTRATISTAS	NE/EX	MANTENER LA POLÍTICA DE CONTRATACIÓN FORTALECIENDO EXIGENCIAS AMBIENTALES, DE EFICIENCIA ENERGÉTICA	SI	DEFINICION CRITERIOS AMBIENTALES. LEY CONTRATOS SECTOR PÚBLICO. EMAS, 14001, 140064, 50001
TRABAJADORES	EX	CONSOLIDACIÓN Y PROMOCIÓN EN LA ORGANIZACIÓN. MEJORA DE LA FORMACIÓN AMBIENTAL CONSIDERADA PARA PROMOCIÓN.	NO	PLAN DE FORMACIÓN AMBIENTAL
ADMINISTRACION PUBLICA	NE	CUMPLIMIENTO DE REQUISITOS LEGALES Y OTROS EN MATERIA AMBIENTAL Y ENERGÉTICA.	SI	IDENTIFICACION Y EVALUACION DE REQUISITOS LEGALES PERIÓDICO
ADMINISTRACION PUBLICA	EX	MANTENER PROACTIVIDAD EN LA GESTIÓN AMBIENTAL, EMAS	SI	SEGUIMIENTO SISTEMA DE GESTIÓN AMBIENTAL EMAS
ADMINISTRACION PUBLICA	EX	MANTENER EL INTERÉS DE LAS EMPRESAS PORTUARIAS POR LA IMPLANTACIÓN DE MEDIDAS DE MEJORA AMBIENTAL Y ENERGÉTICA.	NO	GRUPO ECOPORT Y PROYECTOS DE INNOVACIÓN
COMPETENCIA	EX	MANTENER EL NIVEL DE EXIGENCIA AMBIENTAL Y DE MEJORA EN LA EFICIENCIA ENERGÉTICA	SI	PROMOCIÓN DE NUEVAS CERTIFICACIONES Y PROYECTOS AMBIENTALES/EFICIENCIA ENERGÉTICA
VECINOS	EX	MINIMIZACIÓN DE MOLESTIAS AMBIENTALES	NO	CONTROL DE ASPECTOS AMBIENTALES Y FOMENTO DE ACTIVIDADES DE COMUNICACIÓN/INFORMACIÓN SOCIAL

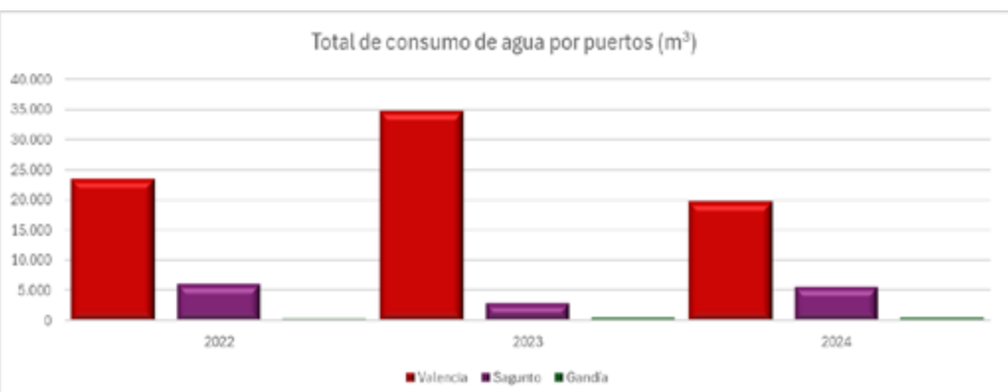
5. MANAGEMENT OF NATURAL RESOURCES

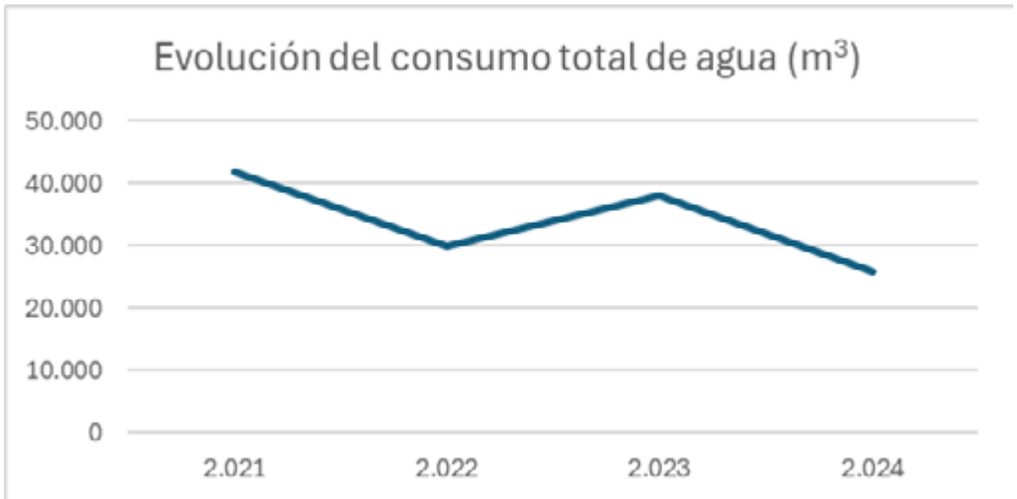
/ 5.1 Water

The PAV's water use corresponds to the consumption registered in buildings and for irrigation of gardens. The PAV's total water use in 2024 was 25,838 m3, a decrease of around 32% compared to the previous year, mainly due to the reduction of irrigation areas following the works carried out and the rectification of an area with recurrent breakdowns, thanks to the modification of the new routes.

Water use per port was distributed as follows:

WATER USE IN M³	2022	2023	2024
VALENCIA	23,594	34,755	19,836
SAGUNTO	6,031	2,870	5,598
GANDÍA	370	422	404
TOTAL	29,995	39,047	25,838





The higher water use is registered in Valencia due to the sheer size of the port. In the port of Sagunto, a reduction in water use was also registered. In Gandía, water use is relatively stable, although there was a slight increase with respect the previous year.

/ 5.2 Electrical energy

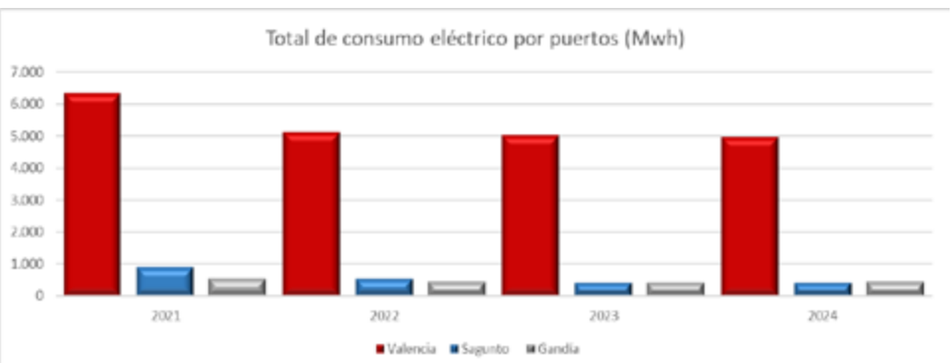
For 2024, the total energy consumption of the Port Authority of Valencia, including buildings and roads within the port premises, totalled 5,783,779 kWh (5,783.778.51Mwh), which represented reduction of 4% on the previous year.

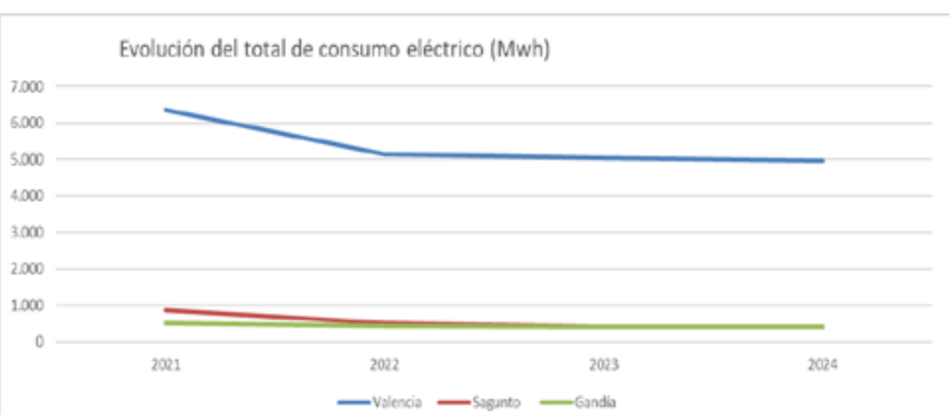
It should be noted that photovoltaic plants have been installed both in the port of Valencia and in the port of Gandía, for which data monitoring has been carried out since January 2024. Together, these installations have generated a total of 3,296,735 kWh, of which 60,725 kWh correspond to the production of the photovoltaic panels installed in September 2023 on the climate inverter of the buildings of the port of Valencia, which represents a relative to the average number of staff of 124.43.

The remaining power generated by the photovoltaic installations is fed into the port's general grid and end users cannot be identified. For this reason, only the power generated and used directly by the PVA has been taken into account for the purposes of relativisation and indicators.

Consumption was distributed across the ports as shown below:

ELECTRICAL ENERGY (MWH)	2021	2022	2023	2024
VALENCIA	6,353	5,142	5,041	4,969
SAGUNTO	870	516	409	400
GANDÍA	518	440	402	415
TOTAL	7,564	6,099	5,853	5,784



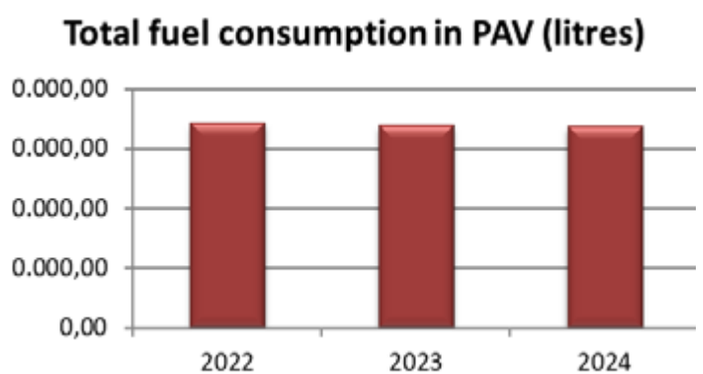


In terms of the source of electricity used, the supply company has certified that the energy is sourced 100% from renewable sources. The energy use certified by the supplier company corresponds to the entire Port Authority, which includes the total power supplied to Valencia, Sagunto and Gandía as well as the companies with facilities within the port premises.

/ 5.3 Fuel

In 2023, fuel consumption for the vehicles of the PAV across the ports managed was 38,128.70 litres of gasoline and 28,929.45 litres of diesel. Total consumption amounts to 67,058.15 litres. This includes:

FUEL (LITRES)	2022	2023	2024
GASOLINE	38,195.69	36,207.51	38,128.70
DIESEL	30,305.92	31,697.62	28,929.45
TOTALS	68,501.61	67,905.13	67,058.15



Fuel consumption is not broken down per port because the service is centralised in Valencia.

The PAV's vehicle fleet in 2024 remains stable with one vehicle less than in the previous year. There are a total of 63 service vehicles, including cars, vans and lorries. Of the total fleet, 12 vehicles are electric and 3 are hybrids. The total number of electric vehicles accounts for 25.40% of the total vehicle fleet, which represents a 2% increase with respect to the previous year, and the fleet has increased by two vehicles in total.

In addition to the vehicles of the PAV, there are several generator sets and other auxiliary equipment that consume fuel. These sets are used to generate electricity in those areas of the piers where they are required.

/ 5.4 Paper consumption

From the year 2010, conventional paper has been replaced with "environmentally friendly" (Triotec IQ) paper which has the guarantee of Forest Stewardship Council (FSC) certification. With the purchase of FSC paper, the consumer is guaranteed that the paper has been produced in a sustainable manner and that its use contributes to the conservation of forests and respect for the environment.

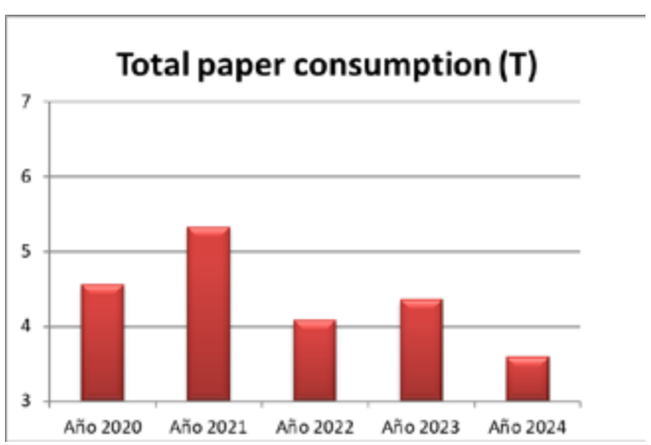
- **The virgin fibre used in its production is obtained in an environmentally friendly manner, maintaining the biodiversity of forest ecosystems and guaranteeing that forests can be used by future generations.**
- **Whitening is performed without chlorine.**
- **The rights of local communities that live or work in the forest are respected.**

The paper used at the PAV is 100% organic paper.

In 2024, 3.59 t of paper was consumed, a reduction of 17.75% on the previous year.

Over recent years, measured have been implemented aimed at the reduction of paper consumption, such as the austerity plan implemented by the PAV, raising awareness among employees, configuration of printers for double-sided printing, and reusing paper for drafts. A downward trend continues despite a slight increase compared to the previous year.

Fuel consumption per port is not specified because the service is centralised Valencia



/ 5.5 Summary of indicators

■ 5.5.1 EMAS INDICATORS

In accordance with the requirements of Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), and its amendment though Regulation EU 2018/2026, the following indicators are proposed:

2023 INDICATOR	ANNUAL TOTAL	RELATIVE
ELECTRICITY USE	5,783,778 MWH	11,852 (MWH/WORKER)
WATER CONSUMPTION 100% FROM NETWORK	25,838 M3	52.946 (M3/WORKER)
TOTAL FUEL CONSUMPTION*	646,694 MWH	1.325 MWH/WORKER
TOTAL SURFACE AREA	3,387,893 M²	6,942.40 (M2 TOTAL SURFACE/WORKER)
TOTAL SEALED SURFACE AREA	2,901,497 M²	5,945.69 (M2 TOTAL SEALED SURFACE AREA/ WORKER)
TOTAL SURFACE AREA IN THE CENTRE BY NATURE	48,656,95 M²	99.71 (M2 TOTAL SEALED GARDENS/WORKER)
TOTAL SEALED SURFACE AREA	486,396 M²	996.71 (M2 TOTAL SEALED SURFACE AREA/ WORKER)
PAPER	3.59 T	0.007 (T/WORKER)
HAZARDOUS WASTE	3.93 T	0.008 (T/WORKER)
NON-HAZARDOUS WASTE	14.40 T	0.029 (T/WORKER)
CO2 EQUIVALENT EMISSIONS ** (DIRECT)	166,92 TCO2EQ	0.342 (T CO2 EQ/ WORKER)
CO2 EQUIVALENT EMISSIONS ** (INDIRECT)	0 T CO2EQ	0 (T CO2 EQ/WORKER)
TOTAL CO2 EQUIVALENT EMISSIONS** (DIRECT + INDIRECT)	166,24 TCO2EQ	0.340 (T CO2 EQ/ WORKER)

*average number of staff 2024 = 488. Data provided by Human Capital

In terms of the annual evolution of the relative indicators calculated, we can observe:

No. workers 2022: 454 No. of employees 2023: 467 No. of employees 2024: 488

RELATIVE INDICATOR	2022	2023	2024
ELECTRICITY USE	13.853	12.532	11.852
WATER USE	66.068	85.471	52.946
FUEL USE	1.456	1.406	1.325
TOTAL SURFACE AREA	9374.98	7840.02	6942.40
TOTAL SEALED SURFACE AREA	8303.62	6798.49	5945.69
TOTAL SURFACE AREA IN THE CENTRE BY NATURE	107.17	104.19	99.71
TOTAL SEALED SURFACE AREA	1071.36	1041.53	996.71
PAPER	0.008	0.009	0.007
HAZARDOUS WASTE	0.019	0.007	0.008
NON-HAZARDOUS WASTE	0.558	0.012	0.029
CO2 EQUIVALENT EMISSIONS**	0,37	0,36	0,340
(DIRECT) (T CO2)	0.37	0.36	0.340
EMISSIONS CO2 EQUIVALENT** (INDIRECT) (T CO2)	0	0	0

* Fuel use: for the calculation of Mwh the conversion factors in the IDAE energy saving and emission reduction calculation are used. Thus, the equivalence of 1 toe of diesel and gasoline in litres and their equivalence in kWh is calculated.
** Emissions of CO2 Equivalent: The Port Authority of Valencia as an organisation does not generate CO2 emissions beyond those directly associated with its own vehicles (direct emissions) and indirect emissions associated with energy consumption. For the calculation of total emissions in T CO2 eq the conversion factors for the years 2017, 2018 y 2019 published in the scope 1 and 2 carbon footprint calculators v.11 of the Ministry of Agriculture and Fisheries, Food and the Environment for the corresponding years were used.

5.5.2 Other indicators

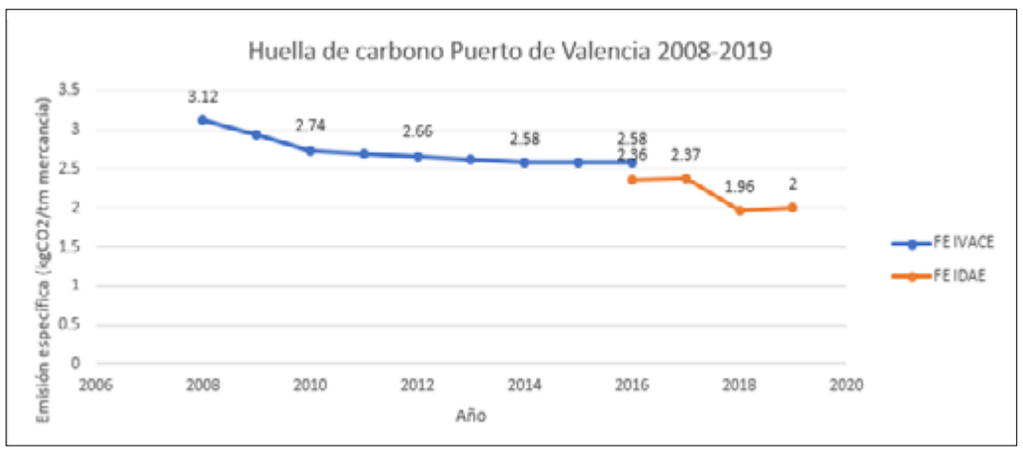
Since 2008, the Carbon Footprint of the entire Port of Valencia has been calculated. These calculations were made according to ISO 14064 and have been validated by the certifying body. In addition, they have been registered in the Carbon Footprint Register of the Ministry for the Ecological Transition, obtaining the "calculo" (calculate) seal until 2016. This seal reflects the efforts of Spanish organisations in the calculation and reduction of greenhouse gas emissions generated by their activity.

In 2021, the Carbon Footprint calculations were carried out from 2016 to 2019, in order to obtain the "reduzco" (I reduce) seal, awarded by the Ministry for the Ecological Transition.

Displayed below is the trend in emissions, cargo moves and Carbon Footprint between 2016 and 2019.

YEAR	2016	2017	2018	2019
EMISSIONS (KGCO2)	151,646,059	159,982,010	139,048,413	147,072,720
TONNES (T)	64,361,045	67,489,331	70,778,376	73,715,925
CARBON FOOTPRINT (KGCO2/T)	2.36	2.37	1.96	2.00

The following graph shows the evolution of the Carbon Footprint.



6. STATE OF THE ENVIRONMENT

/ 6.1 Waste

The Port Authority of Valencia (PAV) is firmly committed to the environmentally responsible management of the waste generated in the course of its activity.

As a waste producer, the PAV is directly responsible for managing waste arising from its own activity.

Likewise, the PAV is indirectly responsible for guaranteeing the appropriate management of the waste generated in the port areas of Valencia, Sagunto and Gandía, acting in this case under the figure of Holder, and ensuring that it is treated in accordance with the environmental regulations in force.

■ 6.1.1 Own waste

The PAV produces waste as a result of its activities in the Ports of Valencia, Sagunto and Gandía. In the port of Valencia, waste is produced in offices, workshops and the clinic, while in the ports of Sagunto and Gandía, waste is produced by office activities and by PAV staff dedicated to maintenance tasks.

As provided for in Law 7/2022, of 8 April, on waste and contaminated soils, for the waste produced directly by the company's activity, the PAV has the status of Producer of hazardous waste with registration number 3631/P02/RP/CV and 21384/P02/CV for sanitary waste produced in the clinic located in Calle Muelle de la Aduana S/N.

The total waste generated by the activity of the PAV in 2024 was 18.33 t of which 14.40 t corresponds to non-hazardous waste and 3.93 t to hazardous waste.

Figure 1 shows the trend in the production of waste generated by the PAV from 2020 to 2024, both years inclusive.

Figure 1

As can be seen in this figure, in the last two years, the development of hazardous waste production has remained stable while the amount of non-hazardous waste has generally increased compared to the year 2023.

Below, graphs 2 and 3 show the data for the amounts and types of both hazardous and non-hazardous waste produced by the PAV in financial year 2024:

Figure 2

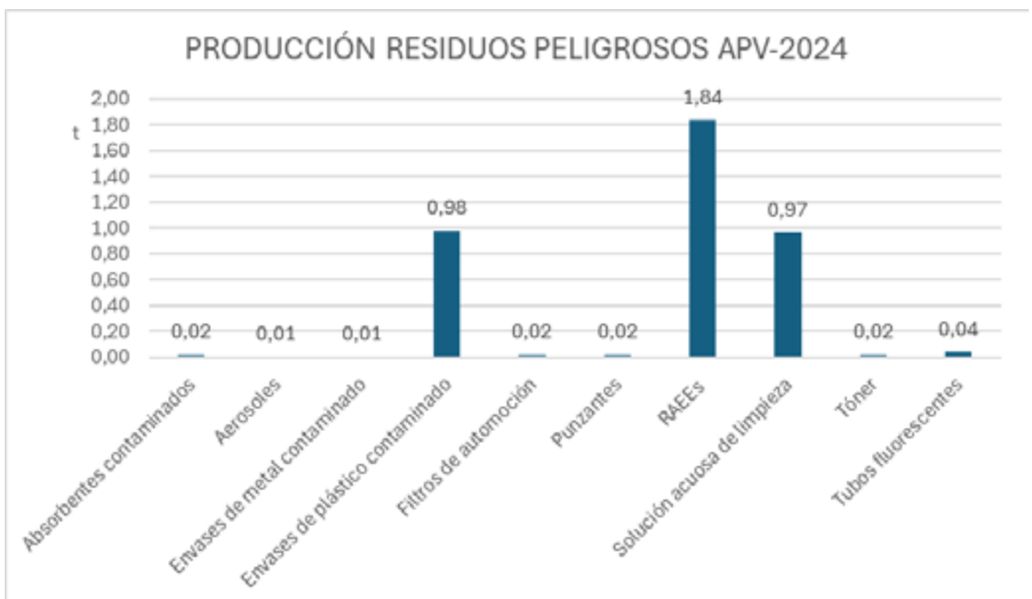
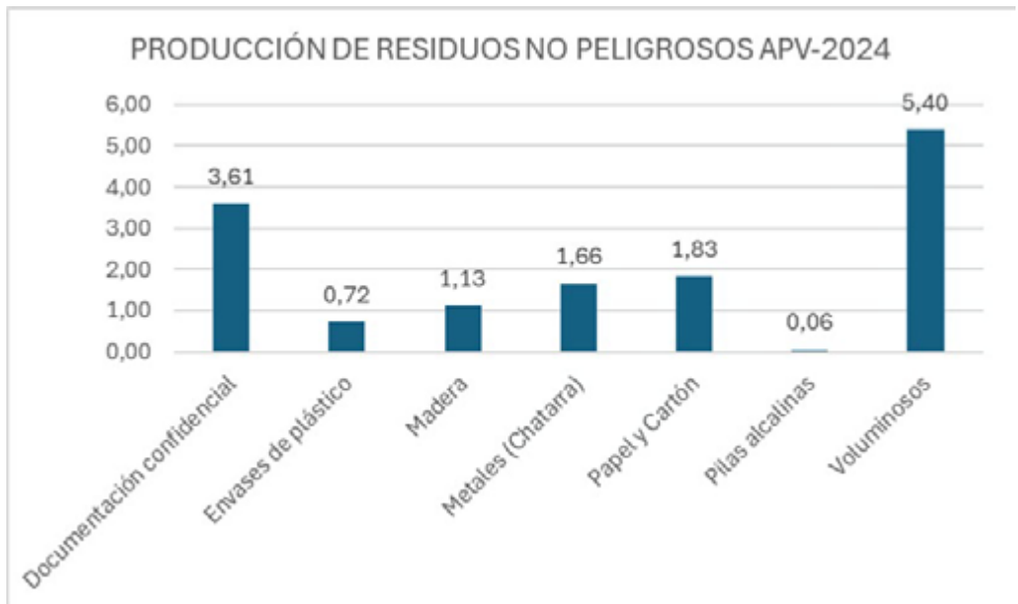


Figure 3



During the financial year 2024 there has been a slight increase in the generation of hazardous waste, reaching a total production of 3.93 tonnes. The groups with the highest volumes are Waste Electrical and Electronic Equipment (WEEE) and contaminated plastic packaging.

For WEEE, there is an increase compared to 2023, from 0.9 tonnes to 1.84 tonnes in 2024. In contrast, the generation of contaminated plastic packaging has decreased over the same period, from 1.40 tonnes in 2023 to 0.98 tonnes in 2024.

For non-hazardous waste, the total production in 2024 has reached 14.40 tonnes. As shown in graph 3, the main types of non-hazardous waste generated by the VPA are Bulky Waste and Confidential Documentation, with 5.40 and 3.61 tonnes respectively.

Comparison with 2023 data shows an increase in the generation of both types of waste, reflecting the evolution of the activities carried out during the year and the continuous effort to ensure adequate and sustainable management of all waste streams.

6.1.2 Waste from the port premises

The companies located on Port Authority of Valencia premises are obliged to adequately manage the waste they generate at their facilities.

To promote the appropriate management of waste in companies on the premises of the ports of Valencia, Sagunto and Gandía, in 2003, a Waste Transfer Centre (WTC) was opened, located in the Port of Valencia, allowing for the collection and storage of waste generated in port facilities. This waste is stored in the WTC for subsequent transport to treatment plants where it will be reused, recycled, assessed or eliminated, respecting the Hierarchy of waste as established in Article 8 of Law 7/2022 of 8 April on waste and contaminated soils for a circular economy.

With the CTR:

- **It facilitates the collection and management of waste generated in the ports of Sagunto, Valencia and Gandía.**
- **It facilitates the administrative processes relating to the removal of waste management.**
- **It contributes to maintaining the port area in harmony with its surroundings, avoiding the abandonment or uncontrolled dumping of waste.**

The CTR of the Port of Valencia is located at the Xitá Pier, with a total surface area of 3,235.18 m2, of which 2.400 m2 is used for the storage of waste prior to transfer for final management. This centre also has a calibrated weighing scale and an authorised vehicle for the transport of hazardous materials.

The companies located in the port facilities managed by the Port Authority of Valencia therefore have access a facility where it is possible to comfortably and flexibly manage the waste in accordance with current laws and regulations and benefiting from the savings generated by the economies of scale.

Waste produced directly or indirectly by the VPA is transported to the CTR until it is transferred to a final treatment plant.

Detail of a trail loaded for transfer of waste to final destination.

Detail of works to load containers containing HW to trailer for subsequent unloading at a final destination plant.

In the case of the waste assumed by the PAV, whether because it appears fortuitously, or in a controlled manner, in the port premises of Valencia, Sagunto or Gandía, the PAV has the Status of Holder with registration numbers POS363, POS365 and POS364 respectively.

The waste produced within the port premises of Valencia, Sagunto and Gandía is classified under two headings .

- **Waste produced in a controlled manner and deposited in containers installed in facilities or waste that has been generated as a result of ad hoc cleaning, which may produce voluminous, inert waste, rubble, etc.**

- **Waste generated incidentally as a result of leaks caused by traffic accidents, waste that may arrive by sea (such as wood, buoys and other remains of maritime signalling), waste from marine pollution emergency actions, dumped waste, etc.**

In relation to the total volume of waste produced at the three port facilities in 20204 and that were managed by the PAV, a total of 24.76 t , broken down as follows:

- **Controlled waste: a total of 3.42 t of non-hazardous waste.**

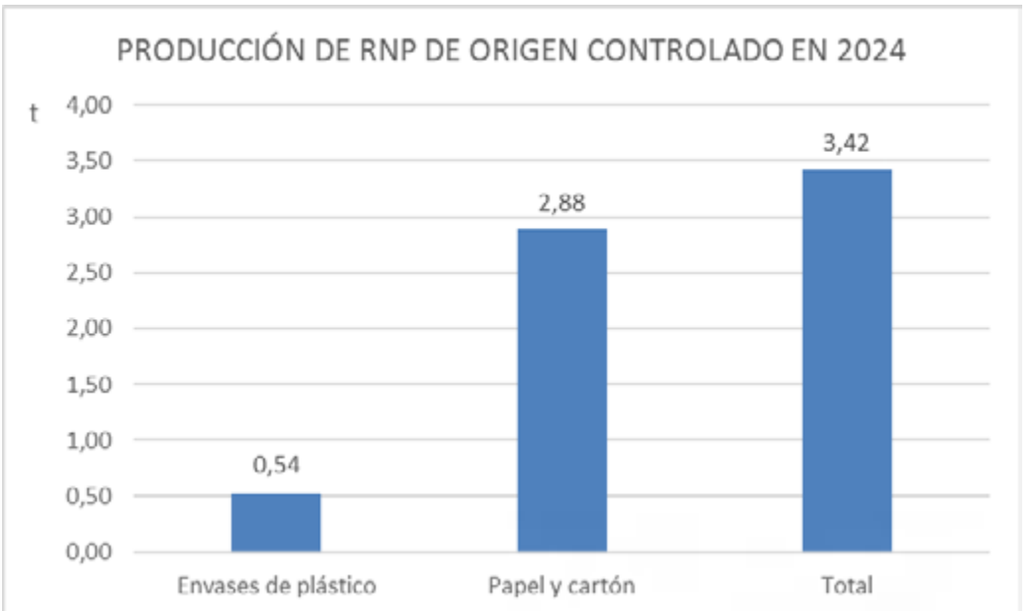
- **Waste of fortuitous origin: a total of 21.34 t, broken down into 3,41 t non-hazardous and 17,93 t hazardous.**

The PAV has therefore become directly and indirectly (through the status as Producer or Holder) responsible for a total of 43.09 t of waste in 2024. Specifically, 21.86 t of hazardous waste and 21.23 t of non-hazardous waste were managed in 2024.

Waste generated in the port premises of Controlled Origin

Below, the types of waste accounting for the greatest volume in financial year 2024 was "Paper/cardboard" under the non-hazardous waste heading, since, as mentioned above no hazardous waste was produced during the period studied, at 2.88 t.
The origin of the "paper/cardboard" heading related to the paper and cardboard deposited in containers provided specifically for that purpose in the different points of the port premises of Valencia, Sagunto and Gandía.

Figure 4



Waste of incidental origin generated in the port premises

In the case of ad hoc waste generated, as can be observed in figures 5 and 6, within the heading non-hazardous waste, "Floating Waste" stands out, with a production figure of 2.86t and within the hazardous waste category, "Contaminating earth" stands out with a figure of 9.21 t.

"Floating Waste" is produced as a result of the cleaning service of the water mirror in the port of Valencia carried out by the vessel LIMPIAMAR III, as well as during the cleaning work carried out in the old Turia riverbed. In 2024 there will be a decrease in the generation of this waste compared to 2023.

With regard to the "Contaminated soil" heading, it should be noted that this waste is usually produced due to the cleaning of spills produced on land as a result of traffic accidents in the three port areas, dumping of bilge water into the sea, etc. In 2024, this volume of waste has increased slightly compared to 2023.

Figure 5

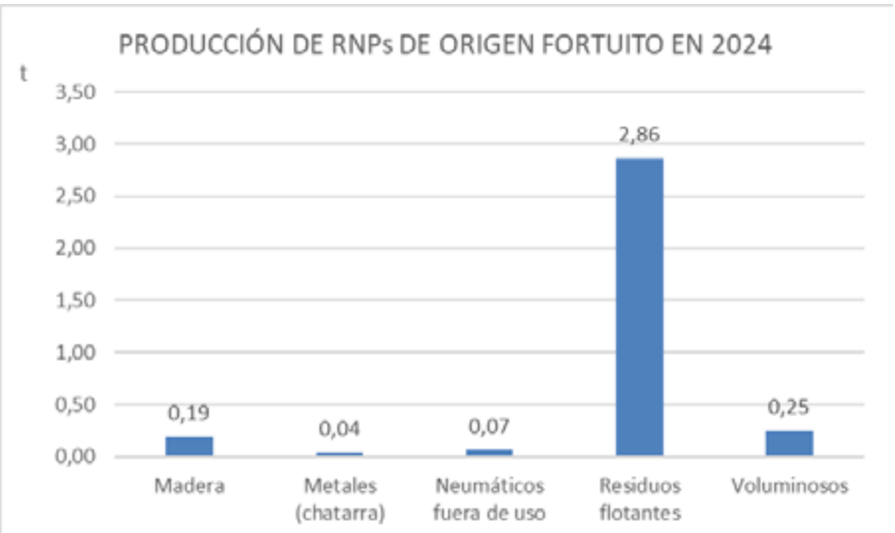
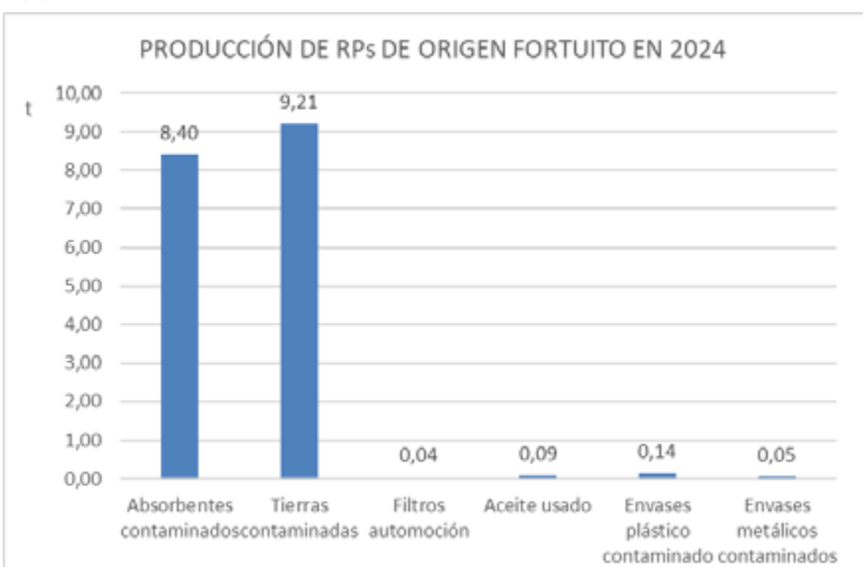


Figure 6



6.1.3 From vessels

The Marpol International Convention 73/78 to prevent marine pollution from ships, is one of the tools backed by the IMP for prevention. It contains six annexes that include detailed rules on the different sources of pollution. These are:

- **Annex I – Rules to prevent hydrocarbon pollution.**
- **Annex II – Rules to prevent pollution from noxious bulk liquid substances.**
- **Annex III – Rules to prevent pollution from hazardous substances transported by sea in packaged form.**
- **Annex IV – Rules to prevent pollution from dirty waters of vessels.**
- **Annex V – Rules to prevent pollution from waste and rubbish.**
- **Annex VI – Rule to prevent atmospheric pollution from ships**

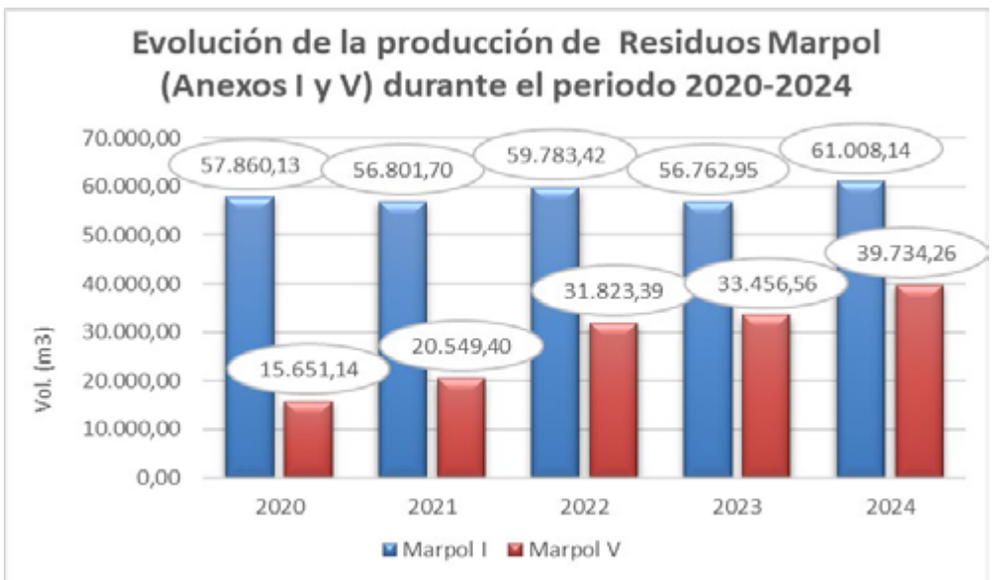
Royal Decree 1381/2002, of 20 December, on port facilities for the reception of waste generated by vessels and cargo waste, establishes the compulsory requirement for all vessels calling at the Ports of Sagunto, Valencia, and Gandía to submit waste subject to the Marpol Convention to a Marpol-authorised facility, except for the established exceptions.

To comply with Article 132 of the consolidated Text of the State Ports and Merchant Navy Act, the PAV charges ships calling at port a fixed fee regardless of whether they use the waste reception service or not. This measure prevents all discharges at sea as vessels can discharge all waste included in of the Marpol Convention as needed.

The volume of waste generated in 2024 at the three ports was 61,008.14 m3 of Marpol I and 39,734.26 m3 of Marpol V, lo for a total of 100,742.40 t:

Below, Figure 7 shows the trend in the production of Marpol I and Marpol V waste over the period 2020 to 2024 both included.

Figure 7



	2024			
	MARPOL I	MARPOL V	MARPOL V	MARPOL V
VALENCIA	56,786.16	122.02	37,430.60	1,862.80
SAGUNTO	4,049.56	67.3	2,260.18	33.50
GANDÍA	172.42	0	43.48	0
TOTAL	61,008.14	189.32	39,734.26	1,896.30

/ 6.2 Air quality control

■ 6.2.1 Air quality in the port premises

The Port Authority of Valencia performs monitoring and control of the different parameters impacting the quality of the environment. In this regard, the monitoring of the air quality is one of the objectives that the Department of Environment has set as a priority. To carry out this surveillance, the Port Authority of Valencia has an instrumentation and monitoring network that continuously supplies air quality , data, which allows us to analyse and categorize the status of same, in accordance with Order TEC/3561/2019, which approved the National Air Quality Index and the subsequent modification of the Annex to this Order, according to the Resolution of 2 September 2020, of the Directorate General for Environmental Quality and Assessment.

Control and monitoring is undertaken of the concentrations of different pollutants, impacting the air quality in the port premises, such as particles (measured in concentrations of PM10, PM2.5 and PM1), sulphur oxide, nitrogen dioxide, carbon monoxide and ozone.

At the same time, meteorological data are recorded by a network of eight weather stations set up at significant locations in the port areas, five of them in the port of Valencia, two in the port of Sagunto and one in the port of Gandía.

The different strategic locations of this control equipment are shown below:

- **Weather Stations (WS)**
- **Air Quality Monitoring Stations, (AQMS)**

Port of Valencia

The map below shows the strategic location of the equipment comprising the air quality network in the Port of Valencia

The port of Valencia has two air quality control stations, hereinafter AQMS, with meteorological sensors and analysers for the measurement of various pollutants. The location of these stations was designated following the study carried out by the CEAM (Centro de Estudios Ambientales del Mediterraneo), in the Poniente Transversal Quay and in the old Turia riverbed, adjacent to the Nazaret neighbourhood. These locations, on the port-city interface, allow us to ascertain the presence of pollutants and their possible influence on the area between the port and the city, making it possible to anticipate solutions to possible episodes of atmospheric pollution.

Both the equipment at the Air Quality Control Cabin and the Weather Stations and the Particle Capture device have a maintenance plan and periodic data validation ensuring the correct data are obtained. These data are validated and published on the website of the Regional Ministry of the Environment, Infrastructures and Territory of the Generalitat Valenciana and on the website of the Port Authority.

Cauce Turia AQMS

Poniente Transversal Quay AQMS

With regard to meteorology, the Port of Valencia has five meteorological stations, hereinafter WS, two more located in the AQMSs and three more distributed in different strategic points of the port, which provide information for operational decision making.

East Breakwater Weather Station

Wind monitor in the East Breakwater tower at 38 metres

Príncipe Felipe Weather Station

Turia Quay Weather Station

Ports of Sagunto and Gandía

In the port of Sagunto there is an AQMS, at the port-city interface, with different pollutant and particle analysers. In addition, there are two weather stations, one located in the AQMS itself and the other in a strategic location for port operational decision-making.

The port of Gandía has a meteorological station that helps port operations.

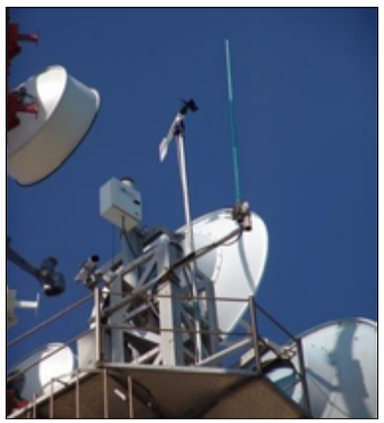
The locations of the same environmental control equipment in the ports of Sagunto and Gandía are shown below:

Port of Sagunto

Port of Gandia

North Sagunto AQMS

Weather Station Beacon at Levante Quay, Sagunto



Weather Station at Serpis Quay, Gandía

6.2.2 Air quality in the port premises

Numerous epidemiological studies have shown the existence of adverse effects on health from ad hoc or prolonged exposure to elevated levels of atmospheric particulate matter. The most recent studies point to lower-diameter particulate matter as causes of major respiratory diseases. From here it has been demonstrated that there is a need for control of atmospheric pollution through particulate matter, not just PM10 but also PM2.5 and PM1.

The PAV, as well as measuring air quality within the port premises, implements several measures to control operations that may have an impact on air quality. Among these measures, the monitoring of wind direction speed variables stands out. This monitoring establishes that , when these variables surpass certain values of intensity and wind duration, loading, unloading or handling of powdery materials are suspended, all through the air quality control network and supervised by the Emergency Control Centre of the PAV. During 2023, a second wind speed and direction sensor has been installed at a height of 38 metres at the East Breakwater location to improve wind speed and direction monitoring.

The PAV has also, to reduce the negative impact of particulate emissions, invested in the construction of physical barriers that minimise the movement of particles in the area for handling bulk in Sagunto. In Sagunto, in addition, the construction of a bulk terminal with enclosed spaces that minimise particulate matter emissions has been completed at the Northeast Quay.

Furthermore, the PAV also insists on measures to minimise particulate emissions for any operation performed in the premises of the PAV, such as cleaning of the common areas and concession space, maintenance of equipment, good handling practices, determination of maximum height of heaps in the case of bulk storage, etc.

The monitoring and control of these concentrations was conducted according to the reference limits imposed in Royal Decree 102/2011, of 28 January, on the improvement of air quality.

POLLUTANT	LIMIT VALUE/ TARGET VALUE/ALERT THRESHOLD	VALUE	AVERAGE PERIOD	
SO2	TIME THRESHOLD	350 MG/M³	1 HOUR	MAY NOT BE EXCEEDED MORE THAN 24 TIMES/ YEAR
	DAILY THRESHOLD	125 MG/M³	24 HOURS	MAY NOT BE EXCEEDED MORE THAN 3 TIMES/ YEAR
	ALERT THRESHOLD	500 MG/M³	1 HOUR	(1)
NO2	TIME THRESHOLD	200 MG/M³	1 HOUR	MAY NOT BE EXCEEDED MORE THAN 18 TIMES/ YEAR
	ANNUAL LIMIT VALUE	40 MG/M³	1 YEAR	
PM10	DAILY THRESHOLD	50 MG/M³	24 HOURS	MAY NOT BE EXCEEDED MORE THAN 35 TIMES/ YEAR
	ANNUAL LIMIT VALUE	40 MG/M³	1 YEAR	
PM2.5	ANNUAL LIMIT VALUE	20 MG/M³	1 YEAR	
CO	THRESHOLD	10 MG	MAX. DAILY EIGHT-HOUR MOVING AVERAGES	
O3	TARGET VALUE	120 MG/M³	MAX. DAILY EIGHT-HOUR MOVING AVERAGES	MAY NOT BE EXCEEDED MORE THAN 25 TIMES/ YEAR ON AVERAGE OVER 3 YEARS
	INFORMATION THRESHOLD	180 MG/M³	1 HOUR	
	ALERT THRESHOLD	240 MG/M³	1 HOUR	FOR 3 CONSECUTIVE HOURS

(1) It shall be deemed to be exceeded if, for three consecutive hours, that value is exceeded hourly at representative air quality locations over an area of at least 100 km2 or over an entire zone or agglomeration, whichever is the smaller.

Assessment of the results obtained in 2024 according to the reference values in regulation.

The Port Authority of Valencia has been completing a monthly report of the data, assessing the trend for the purpose of identifying the possible causes. The procedure is based on the calculation of the validated data records of the values whose limits are legislated according to the reference standard. In some cases, maximum number of exceeding values or average limit values are set according to a time period (monthly, yearly, daily, eight-hourly, etc.).
The atmospheric indices registered in the year 2024 were the following:

NUMBER OF EXCEEDING VALUES OF CONCENTRATION LEVELS OF SULPHUR DIOXIDE (SO2)

SO 2 (SULPHUR DIOXIDE)	2024	
	DAILY AVERAGE NO. EXC. 125 MG/M3 (< 3 EXCEEDING VALUES/ YEAR)	HOURLY AVERAGE NO. EXC. 350 MG/M3 (< 24 EXCEEDING VALUES/ YEAR)
PONIENTE TRANSVERSAL QUAY AQMS	0 EXCEEDING VALUES	0 EXCEEDING VALUES
TURIA RIVERBED AQMS	0 EXCEEDING VALUES	0 EXCEEDING VALUES

NUMBER OF EXCEEDING VALUES AND AVERAGE MOBILE VALUE OF CONCENTRATION LEVELS OF CARBON MONOXIDE (CO)

CO (CARBON MONOXIDE)	2024
	MAXIMUM DAILY VALUE OF EIGHT-HOUR MOBILE AVERAGES
PONIENTE TRANSVERSAL QUAY AQMS	THE LIMIT VALUE IS NOT EXCEEDED AT ANY TIME
TURIA RIVERBED AQMS	THE LIMIT VALUE IS NOT EXCEEDED AT ANY TIME
NORTH SAGUNTO AQMS	THE LIMIT VALUE IS NOT EXCEEDED AT ANY TIME

NUMBER OF EXCEEDING VALUES OF CONCENTRATION LEVELS OF NITROGEN DIOXIDE (NO 2)		
NO2 (NITROGEN DIOXIDE)	2024	
	HOURLY AVERAGE NO. EXC. 200 MG/M3 (< 18 EXCEEDENCES/ YEAR)	ANNUAL AVERAGE THRESHOLD 40 MG/M3
PONIENTE TRANSVERSAL QUAY AQMS	0 EXCEEDING VALUES	20
TURIA RIVERBED AQMS	0 EXCEEDING VALUES	24
NORTH SAGUNTO AQMS	0 EXCEEDING VALUES	15

NUMBER OF EXCEEDING VALUES FOR OZONE (O3) CONCENTRATION LEVELS			
O3 (OZONE)	2024		
	DAILY MAXIMUM FOR EIGHT HOUR MOBILE AVERAGES NO. EXC. 120 MG/M3 TARGET VALUE (< 25 EXCEEDING VALUES/ YEAR)	HOURLY AVERAGE NO. EXC. 180MG/ M^3 POPULATION INFORMATION THRESHOLD	HOURLY AVERAGE NO. EXC. 240MG/M^3 POPULATION ALERT THRESHOLD
PONIENTE TRANSVERSAL QUAY AQMS	0 EXCEEDING VALUES	0 EXCEEDING VALUES	0 EXCEEDING VALUES
TURIA RIVERBED AQMS	0 EXCEEDING VALUES	0 EXCEEDING VALUES	0 EXCEEDING VALUES
NORTH SAGUNTO AQMS	7 EXCEEDING VALUES	0 EXCEEDING VALUES	0 EXCEEDING VALUES

NUMBER OF EXCEEDING VALUES AND AVERAGE ANNUAL VALUE OF CONCENTRATION LEVELS OF PM10 PARTICLES			
PM10 (PARTICLES <10 MM	2024		
	DAILY AVERAGE NO. EXC. 50 MG/M3 WITHOUT DISCOUNT (< 35 EXCEEDENCES/ YEAR)	Daily average No. Exc. 50 µg/m3 after discount (< 35 exceedences/ year)	ANNUAL AVERAGE THRESHOLD 40 MG/ M3
PONIENTE TRANSVERSAL QUAY AQMS	4 EXCEEDING VALUES	2 EXCEEDING VALUES	17
TURIA RIVERBED AQMS	15 EXCEEDING VALUES	7 EXCEEDING VALUES	22

AVERAGE ANNUAL VALUE OF CONCENTRATION LEVELS OF PM2.5	
PM2.5 (PARTICLES <2.5 MM)	2024
	Annual average Threshold 20 µg/m3
PONIENTE TRANSVERSAL QUAY AQMS	8
TURIA RIVERBED AQMS	10

Conclusions Air Quality Results

After the analysis of the data corresponding to the year 2024 (January - December) and the assessment of these with respect to applicable limit values, the following conclusions are reached:

- **Sulphur dioxide (SO2,) and carbon monoxide (CO2):**

There were no exceeding values of the limit values or objectives set for any of these pollutants at any of the stations in the PAV network, with the values measured being far removed from them.

- **Nitrogen dioxide (NO2):**

There were no exceeding values of the limit and alert threshold values at any of the stations.

- **Ozone (O3):**

With regard to ozone, the legislation establishes different information and alert thresholds as well as a target value for the protection of human health and vegetation. In this order, none of the above-mentioned information and alert thresholds, set at 180 and 240 µg/m^3, respectively, were exceeded during the year 2024.

With regard to the long-term target value for the protection of human health, set at 120 µg/m^3 by the relevant laws and regulations, and which must not be exceeded on more than 25 instances per year, as a 3-year average, it can be stated that it has only been exceeded 7 times at the North Sagunto station, so that during the year 2024 this requirement will not be exceeded as a 3-year average, nor considering 2024 in isolation.

- **Particulate matter (PM10) and (PM2.5):**

With regard to the daily limit value for PM10, the number of exceeding values is well below the 35 exceeding values set in the regulation. The annual mean did not exceed the limit value at any station either.
As for the PM2.5, fraction, there were no exceedences of the limit values or objectives set by RD 102/2011.

In summary, in the year 2024, the data registered complied with the air quality limit values defined in Royal Decree 102/2011 of 28 January, on the improvement of air quality.
Finally, the annual average values of all the aforementioned parameters have been calculated for the same year 2024, which are shown together with other nearby stations in the municipality of Valencia in the following section.

6.2.3 Environmental concentrations in the port of valencia environment

With the aim of assessing the results obtained in the port premises, the data of the measures taken in the city of Valencia by the Regional Ministry of Agriculture, Environment, Climate Change and Rural Development were collected. The statistical data displayed in the following table were obtained from the information on the Regional Ministry's website.

Annual average values of the city of Valencia:

STATION	SO2 MG/M3	NO2 MG/M3	O3MG/M3	CO MG MG/M3	PM10 MG/M3	PM2.5 MG/M3	PM1MG/M3
AVDA. FRANCE	3	14	52	0.2	17	10	-
BULEVARD SUR	3	14	51	-	-	-	-
MOLÍ DEL SOL	4	16	51	0.1	12	10	5
PISTA DE SILLA	4	19	48	0.2	15	6	-
POLITÉCNICO	3	11	51	-	17	11	-
VIVEROS	3	18	58	-	-	-	-
CENTRE	-	20	-	-	27	12	-

Annual average values for the municipality of Sagunto, at three stations outside the port area:

STATION	SO2 MG/M3	NO2 MG/M3	O3MG/M3	CO MG MG/M3	PM10 MG/M3	PM2.5 MG/M3	PM1MG/M3
SAGUNTO PORT	3	13	65	0.1	8	6	3
NORTH SAGUNTO	-	7	62	-	-	-	-
SAGUNT CEA	4	6	58	0.1	15	7	-

The average annual values obtained by the stations in the PAV network:

STATION	SO2 MG/M3	NO2 MG/M3	O3 MG/M3	CO MG/M3	PM10 MG/M3	PM2.5 MG/M3	PM1MG/M3 MG/M3
PONIENTE TRANSVERSAL QUAY AQMS	3	20	49	0.2	17	8	5
TURIA RIVERBED AQMS	4	24	48	0.1	22	10	7
SAGUNTO NORTE AQMS	-	15	62	0.2	-	-	-

The environmental assessment made according to the regulation indicates that all parameters are under the lower assessment threshold", below which it would be possible to limit the use of modelling techniques to assess air quality.

In those cases where the alert and/or information thresholds for the half hour, no half-hour values exceeding those thresholds were recorded in the case for sulphur dioxide, nitrogen dioxide and tropospheric ozone.

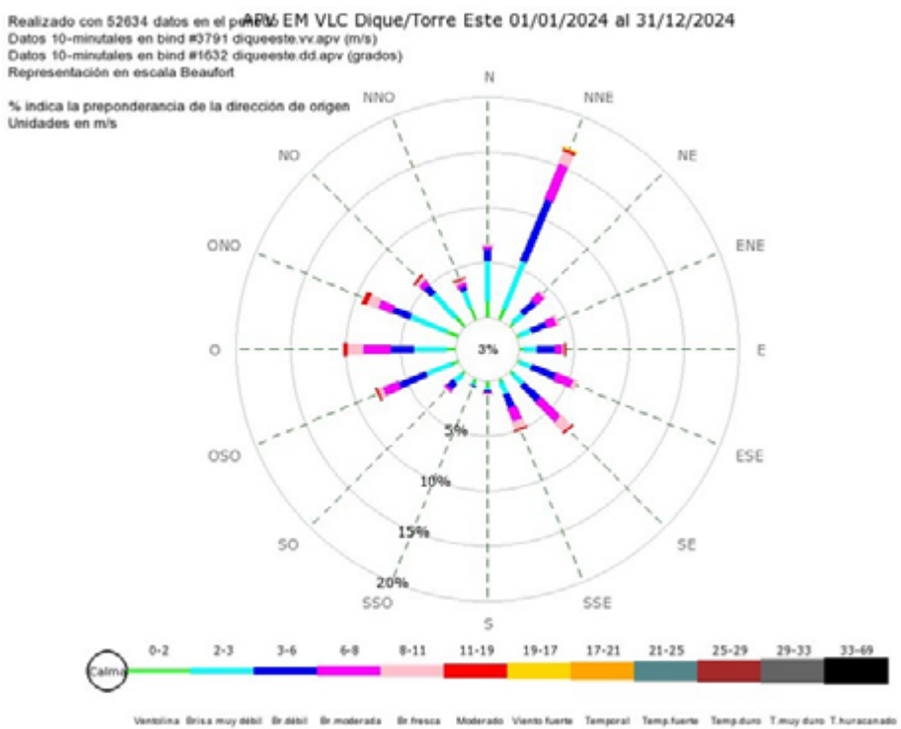
In general, the parameters of the stations of the Network of the Port Authority of Valencia are within the range of normality and correlation with respect to the automatic stations nearby in the city of Valencia and in the Sagunto area. In addition, it is worth noting the equality of values between the two AQMSs of the port of Valencia in almost all the parameters.
In short, for 2024 the results obtained across the Port Authority of Valencia Network complied with the air quality limit values defined in Royal Decree 102/2011, of 28 January, relating to the improvement of air quality.

6.2.4 Data recorded at weather stations

Monthly statistical values at the weather station VALENCIA EAST BREAKWATER WS – Year 2024

	VV (m/s)				LL (l/m²)	
	Muestras	Media	Máx.	Mín.	Muestras	Acumulado
Ene	31	3.4	6.1	1.1	31	8.0
Feb	29	3.5	7.1	0.7	29	6.0
Mar	31	3.7	8.1	1.4	31	16.2
Abr	30	3.2	6.0	1.6	30	4.0
May	31	3.3	6.6	1.6	31	3.6
Jun	30	3.3	5.8	1.7	30	26.0
Jul	27	2.7	3.8	1.8	27	13.6
Ago	31	2.6	3.6	1.6	31	0.6
Sept	30	3.5	6.6	2.1	30	91.8
Oct	31	3.5	6.8	1.8	31	85.0
Nov	30	3.0	6.6	1.4	30	19.6
Dic	31	3.1	6.5	1.3	31	36.0
				TOTAL		310.4

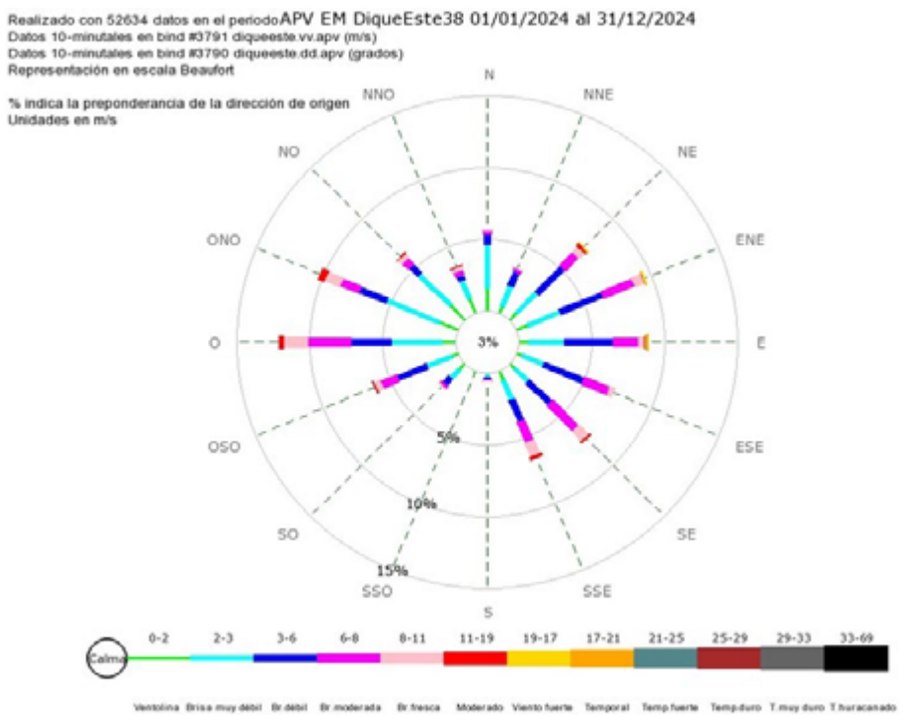
Wind rose -VALENCIA EAST BREAKWATER WS – 2024



Monthly statistical values at the weather station VALENCIA EAST BREAKWATER 2 WS – Year 2024

	VV (m/s)			
	Muestras	Media	Máx.	Mín.
Ene	31	4.2	7.8	1.4
Feb	29	4.3	8.8	1.1
Mar	31	4.8	10.1	1.9
Abr	30	4.1	7.0	2.3
May	31	4.7	8.2	2.5
Jun	30	4.6	7.0	2.7
Jul	31	3.9	5.3	2.4
Ago	31	3.8	5.8	2.2
Sept	30	4.4	8.0	2.9
Oct	31	4.7	15.5	1.9
Nov	30	4.1	10.1	1.8
Dic	31	3.7	8.0	1.5

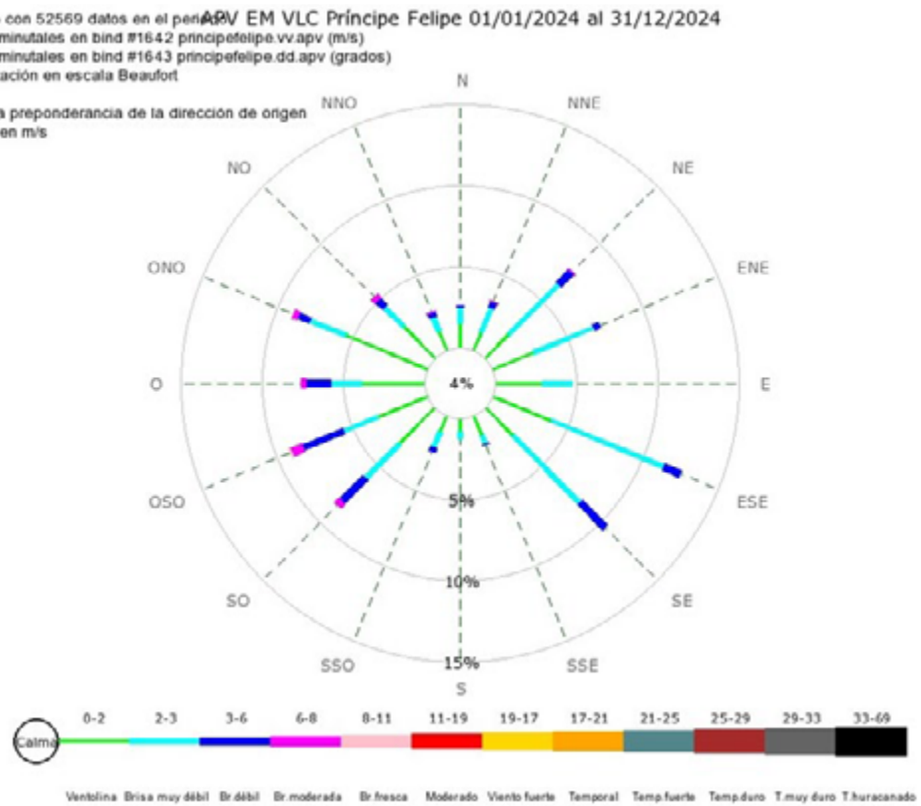
Wind rose -VALENCIA EAST BREAKWATER WS – 2024



Monthly statistical values, from daily averages, at the weather station VALENCIA PRINCIPE FELIPE QUAY – 2024

	VV (m/s)				TMP (°C)				HR (%)				RS (w/m²)				LL (l/m²)	
	Muestras	Media	Máx.	Min.	Muestras	Media	Máx.	Min.	Muestras	Media	Máx.	Min.	Muestras	Media	Máx.	Min.	Muestras	Acumulado
Ene	31	2.29	4.28	0.87	31	14.5	20.3	10.2	31	74	95	40	31	76	118	14	31	0.8
Feb	28	2.39	5.15	0.63	28	14.6	12.0	18.4	28	71	98	42	28	120	174	49	28	0.0
Mar	31	2.55	5.23	1.07	31	14.5	17.4	11.4	31	71	100	38	31	156	226	44	31	17.6
Abr	30	2.10	4.07	1.23	30	16.6	19.8	14.5	30	69	90	44	30	244	296	71	30	5.0
May	31	2.22	4.63	1.45	31	19.7	17.0	22.7	31	71	43	85	31	294	334	143	31	3.6
Jun	30	2.18	4.03	1.48	30	23.0	25.6	18.9	30	76	58	87	30	294	346	123	30	23.6
Jul	31	1.88	2.21	1.34	31	26.3	28.0	23.5	31	78	86	66	31	304	342	249	31	14.6
Ago	31	1.76	2.27	1.25	31	27.0	28.0	25.2	31	76	83	60	31	262	303	155	31	0.4
Sept	30	2.13	4.49	1.52	30	23.2	26.7	20.3	30	71	95	47	30	198	260	62	30	97.4
Oct	30	2.20	4.03	1.14	30	20.5	25.2	13.8	30	75	97	51	30	152	220	50	30	100.0
Nov	30	1.98	4.61	1.13	30	17.1	19.5	14.2	30	83	94	62	30	99	140	18	30	24.8
Dic	31	1.98	5.36	0.93	31	12.9	17.9	9.9	31	72	94	41	31	88	113	24	31	45.2
																TOTAL		333.0

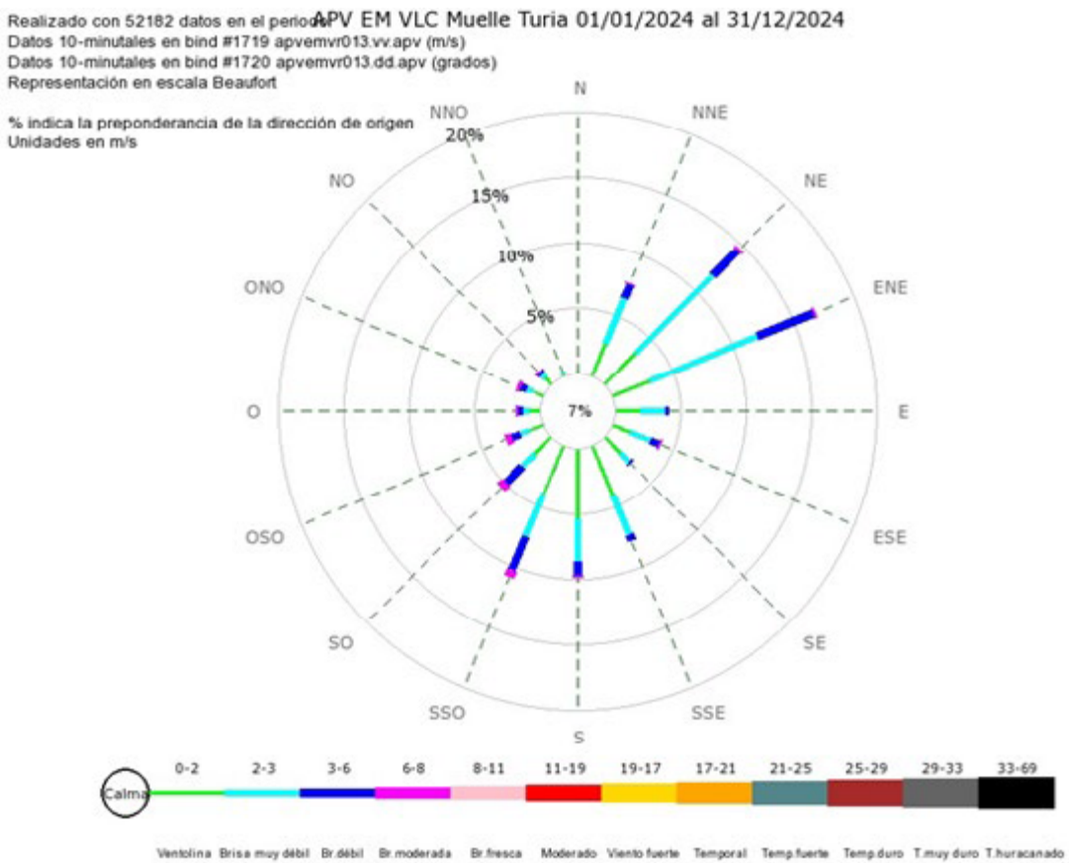
Wind rose - WS VALENCIA PRINCIPE FELIPE QUAY – 2024



Monthly statistical values at the weather station TURIA WS - Year 2024

	VV (m/s)				PRB (mb)			
	Muestras	Media	Máx.	Min.	Muestras	Media	Máx.	Min.
Ene	31	2.20	4.49	0.73	31	1019	1032	1001
Feb	29	2.32	4.88	0.65	29	1015	1030	992
Mar	31	2.53	5.70	1.20	31	1009	1022	992
Abr	30	2.11	3.93	1.18	30	1015	1028	1002
May	31	2.44	4.70	1.59	31	1012	1018	1003
Jun	30	2.40	4.08	1.51	30	1012	1017	1005
Jul	31	2.21	3.05	1.53	31	1012	1017	1007
Ago	31	2.17	2.93	1.51	31	1012	1016	1008
Sep	30	2.26	4.65	1.45	30	1012	1021	1004
Oct	31	2.41	7.75	1.10	31	1013	1025	1004
Nov	26	1.92	4.41	0.95	26	1019	1025	1011
Dic	31	1.97	5.08	0.84	31	1024	1037	1014

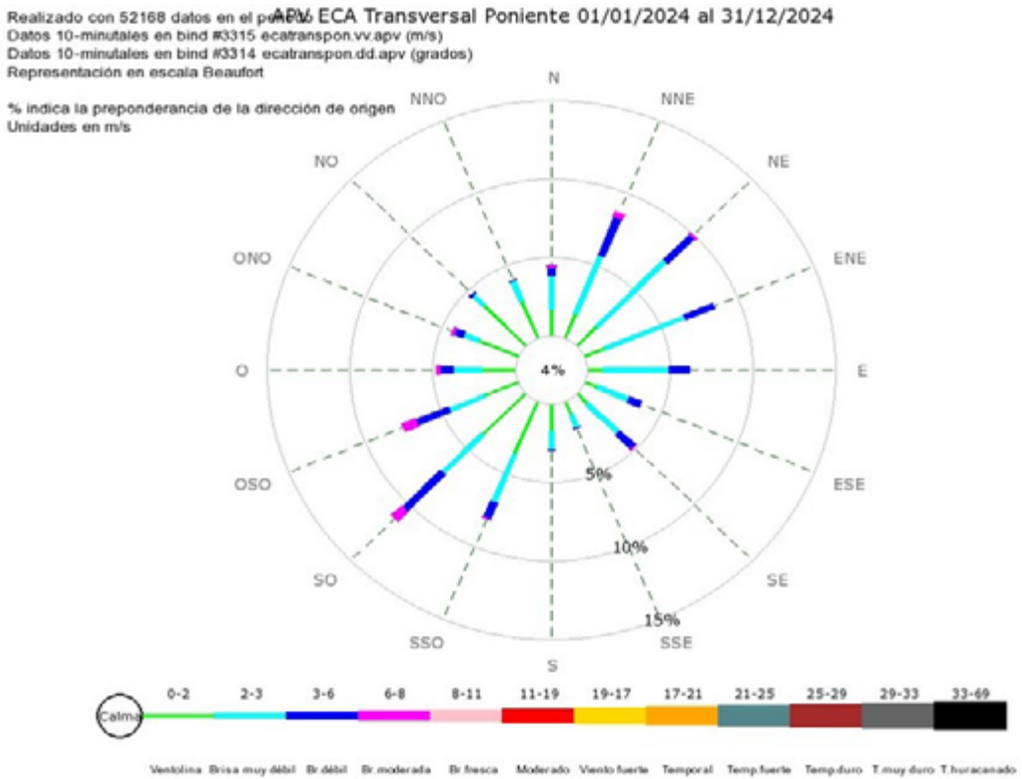
Wind rose - TURIA QUAY WS – 2024



Monthly statistical values of WS at PONIENTE TRANSVERSAL QUAY AQMS - Year 2024

	VV (m/s)				TMP (°C)				HR (%)				RS (w/m²)				PRB (mb)				LL (l/m²)	
	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Acumulado
Ene	31	2.3	4.4	0.7	31	13.6	19.9	9.3	31	63	85	32	31	87	138	14	31	1022	1037	1005	31	11.6
Feb	29	2.5	5.0	0.8	29	14.2	17.9	11.5	29	60	89	37	29	135	202	58	29	1019	1034	996	29	8.6
Mar	31	2.8	5.7	1.2	31	14.6	17.8	11.5	31	64	93	31	31	169	235	49	31	1012	1024	994	31	21.4
Abr	27	2.2	4.2	1.4	30	16.7	20.3	14.5	30	61	84	38	30	258	324	73	30	1018	1032	1004	30	12.0
May	31	2.7	4.6	1.7	31	19.9	22.6	17.7	31	64	81	35	31	297	336	147	31	1015	1022	1006	31	2.8
Jun	30	2.5	4.1	1.8	30	23.2	26.8	19.1	30	71	83	50	30	294	345	114	30	1016	1021	1008	30	34.8
Jul	31	2.3	3.0	1.6	31	26.5	28.9	23.7	31	74	83	57	31	313	343	254	31	1017	1021	1011	31	11.4
Ago	31	2.2	3.3	1.5	31	27.6	28.5	26.0	31	72	80	56	31	272	311	166	31	1016	1020	1012	31	0.6
Sept	30	2.4	4.8	1.7	30	23.9	28.3	20.9	30	65	89	41	30	200	268	56	30	1016	1025	1008	30	106.8
Oct	29	2.4	4.3	1.2	29	21.1	26.5	14.2	29	67	92	45	29	155	224	56	29	1017	1029	1007	29	89.4
Nov	30	2.3	5.0	1.2	30	17.5	20.2	14.8	30	76	89	53	30	98	136	21	30	1023	1029	1014	30	16.0
Dic	31	2.4	4.3	1.0	31	13.3	18.8	10.4	31	62	85	35	31	89	115	26	31	1028	1040	1016	31	38.2
																				TOTAL		353.6

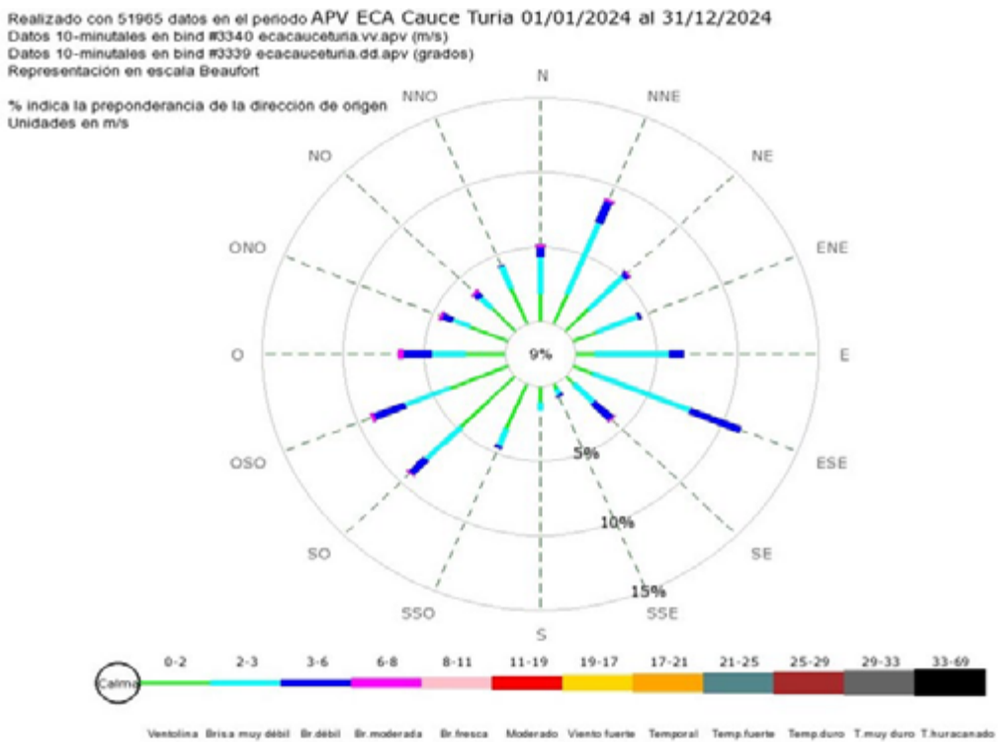
Wind rose - WS at PONIENTE TRANSVERSAL AQMS – 2024



Monthly statistical values, based on daily average, at the WS at TURIA RIVERBED AQMS - Year 2024

	VV (m/s)				TMP (°C)				HR (%)				RS (w/m²)				PRB (mb)				LL (l/m²)	
	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Acumulado
Ene	28	1.94	3.61	0.41	28	13.7	20.4	9.0	28	65	86	34	28	86	136	14	28	1025	1037	1008	28	10.0
Feb	29	2.00	4.34	0.52	29	29.0	18.1	11.2	29	64	94	39	29	1016	1035	994	29	1016	1035	994	29	8.4
Mar	31	2.29	4.77	1.01	31	14.7	18.3	11.4	31	70	100	32	31	176	245	52	31	1011	1025	994	31	20.4
Abr	30	2.10	3.33	1.30	30	16.8	20.7	14.3	30	69	95	41	30	264	329	69	30	1019	1032	1003	30	10.4
May	31	2.30	3.69	1.46	31	20.0	22.9	17.5	31	73	93	37	31	294	339	137	31	1014	1021	1005	31	4.8
Jun	30	2.30	3.30	1.51	30	23.4	27.1	19.3	30	81	93	56	30	291	346	111	30	1015	1022	1007	30	34.2
Jul	31	2.06	2.57	1.27	31	28.6	32.5	24.0	31	83	91	64	31	303	342	236	31	1018	1024	1012	31	17.4
Ago	31	2.00	2.59	1.33	31	31.2	32.0	29.4	31	82	91	64	31	260	299	155	31	1019	1023	1014	31	0.4
Sept	30	2.15	3.73	1.58	30	27.2	31.7	24.0	30	75	100	46	30	193	256	54	30	1018	1026	1009	30	113.0
Oct	31	2.18	5.98	1.05	31	24.1	29.9	16.6	31	80	100	49	31	141	213	29	31	1018	1029	1009	31	91.2
Nov	30	1.86	4.40	0.85	30	20.0	22.9	15.1	30	89	100	62	30	92	130	18	30	1024	1030	1015	30	18.8
Dic	28	1.74	4.69	0.73	28	12.6	17.7	9.4	26	67	93	35	28	81	115	22	28	1025	1031	1018	30	39.2
																				TOTAL		368.2

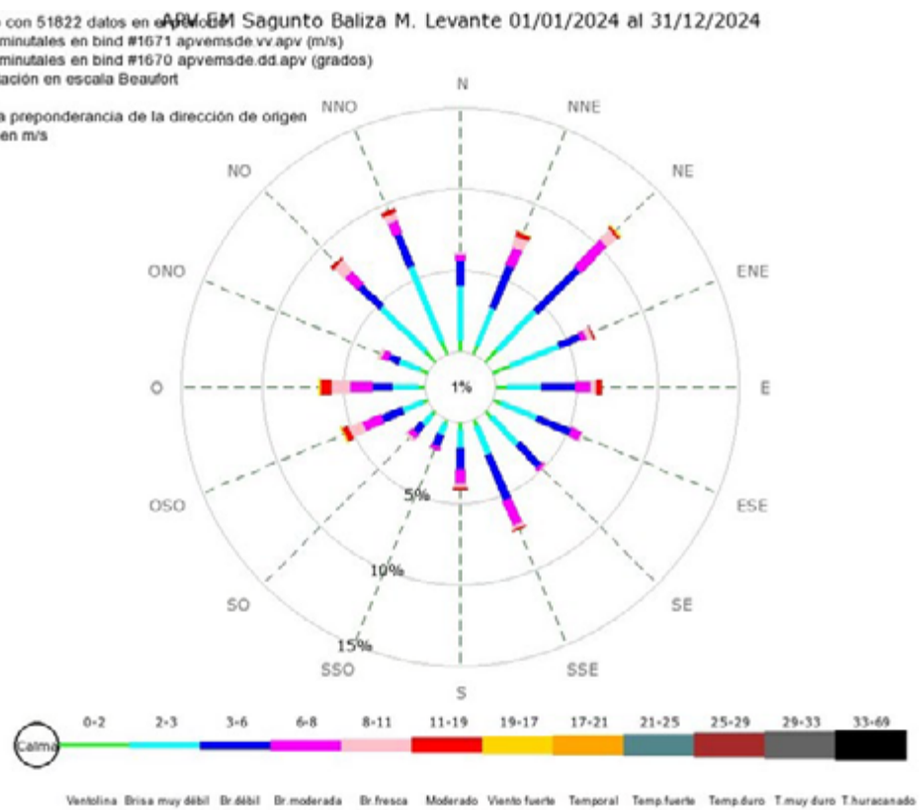
Wind rose - TURIA RIVERBED AQMS – Year 2024



Monthly statistical values at the weather station WS LEVANTE QUAY– Year 2024

	VV (m/s)				TMP (°C)				HR (%)				RS (w/m²)				PRB (mb)				LL (l/m²)	
	Muestras	Media	Máx.	Min.	Muestras	Media	Máx.	Min.	Muestras	Media	Máx.	Min.	Muestras	Media	Máx.	Min.	Muestras	Media	Máx.	Min.	Muestras	Acumulado
Ene	31	4.58	10.56	1.45	31	12.8	19.0	8.2	31	64	88	34	31	89	134	11	31	1020	1033	1004	31	5.2
Feb	28	4.49	9.72	1.29	28	13.3	16.4	10.2	28	63	92	37	19	135	168	60	28	1018	1032	998	28	4.6
Mar	31	4.93	9.35	1.61	31	13.6	16.6	11.1	31	68	99	36	23	144	193	32	31	1010	1020	994	31	14.4
Abr	30	3.93	7.50	2.13	30	15.5	18.1	13.7	30	66	90	39	30	205	252	72	30	1014	1025	1002	30	7.2
May	31	4.06	8.63	2.21	31	19.3	21.7	17.0	31	71	87	41	31	221	258	179	31	1010	1016	1002	31	1.2
Jun	30	3.92	8.63	2.51	30	22.4	26.1	18.8	30	75	86	52	30	210	253	79	30	1010	1018	1002	30	11.6
Jul	31	3.27	4.56	1.83	31	25.7	28.1	23.3	31	77	87	55	31	218	263	143	31	1008	1013	1000	31	62.0
Ago	27	3.30	4.29	2.28	27	26.9	27.4	25.4	27	74	83	54	27	191	225	110	27	1006	1010	1001	27	0.4
Sept	30	4.26	8.39	2.88	30	24.0	28.7	20.9	30	67	91	43	30	158	206	39	30	1011	1021	1000	30	58.4
Oct	31	4.71	10.48	2.39	31	21.4	25.8	15.0	31	72	96	44	31	151	206	49	31	1013	1027	1001	31	61.6
Nov	27	4.03	9.27	1.80	27	17.8	20.3	15.2	27	76	89	50	27	112	143	20	3	1021	1022	1020	27	7.6
Dic	31	4.39	8.94	1.99	31	14.2	20.8	11.0	31	61	86	34	31	102	128	31	18	1025	1036	1016	31	3.6
																				TOTAL		237.8

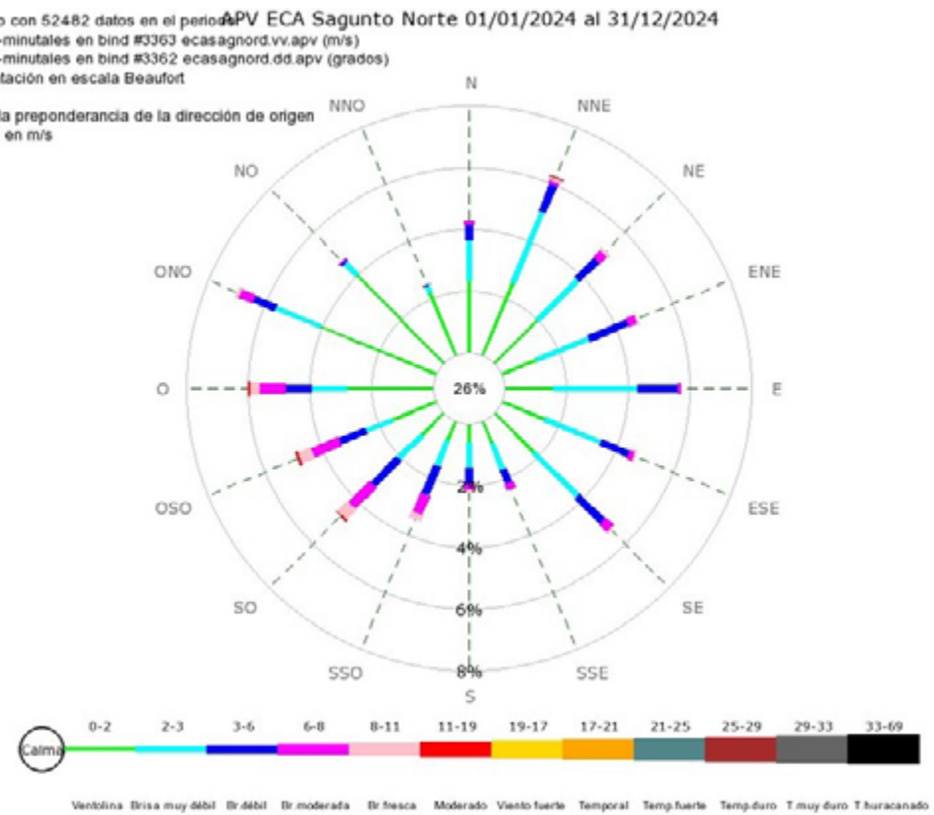
Wind rose - WS LEVANTE QUAY, SAGUNTO - Year 2024



Monthly statistical values, based on daily average, at the AQMS at SAGUNTO NORTE WS - Year 2024

	VV (m/s)				TMP (°C)				HR (%)				RS (w/m²)				PRB (mb)				LL (l/m²)	
	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Acumulado
Ene	31	2.41	7.96	0.46	31	13.6	20.0	8.9	31	61	94	28	31	70	119	2	31	1022	1036	1004	31	5.6
Feb	29	2.47	6.57	0.44	29	14.3	17.9	11.4	29	57	97	30	29	122	209	39	29	1017	1034	995	28	4.9
Mar	31	2.71	6.20	0.72	31	14.7	18.0	12.0	31	62	100	29	31	178	259	21	31	1009	1021	990	31	20.0
Abr	30	2.01	5.04	0.54	30	16.5	19.2	14.4	30	52	83	30	30	273	346	59	30	1014	1028	1001	30	8.5
May	31	2.10	5.12	0.74	31	19.8	22.2	17.4	31	60	75	33	31	265	370	177	31	1011	1018	1002	31	1.2
Jun	30	2.12	5.04	0.81	30	23.2	27.5	19.0	30	64	74	42	30	244	338	66	30	1011	1016	1004	30	12.7
Jul	29	1.52	2.65	0.64	29	26.5	28.7	24.3	29	67	79	46	29	293	324	138	29	1011	1015	1005	29	14.1
Ago	31	1.63	2.48	1.01	31	27.5	28.2	26.0	31	64	72	45	31	253	304	135	31	1010	1014	1006	31	0.9
Sept	30	1.96	5.04	0.81	30	23.8	28.6	20.5	30	59	94	35	30	190	258	28	30	1011	1019	1003	30	74.6
Oct	31	2.22	7.42	0.64	31	20.9	25.9	14.2	31	67	100	37	31	142	216	32	31	1011	1023	1001	31	64.5
Nov	30	1.48	5.62	0.37	30	17.1	19.6	14.6	30	70	90	43	30	86	126	5	30	1017	1023	1008	30	9.1
Dic	31	2.15	6.62	0.46	31	13.4	19.7	10.2	31	55	81	29	31	81	105	20	31	1022	1035	1011	31	4.3
																				TOTAL		220.4

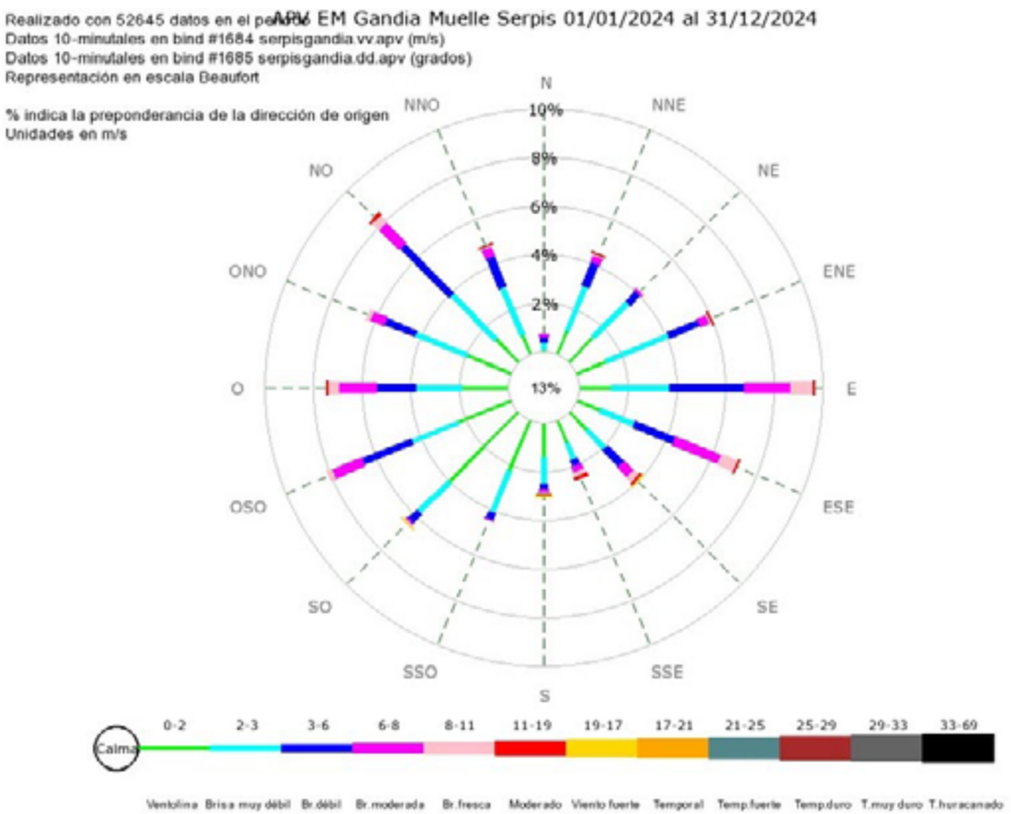
Wind rose - SAGUNTO NORTE AQMS - Year 2024



Monthly statistical values at the weather station WS SERPIS GANDÍA - Year 2024

	VV (m/s)				TMP (°C)				HR (%)				RS (w/m²)				PRB (mb)				LL (l/m²)	
	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Media	Máx.	Mín.	Muestras	Acumulado
Ene	31	3.45	10.22	0.66	31	13.9	20.5	8.7	31	63	98	29	28	38	106	1	31	1024	1036	1008	31	49.0
Feb	29	2.85	7.68	0.54	29	14.3	20.2	11.0	29	61	98	32	29	100	195	2	29	1017	1032	994	29	18.4
Mar	31	3.18	7.44	0.91	31	15.0	19.0	12.2	27	60	98	24	30	145	226	10	31	1010	1022	992	31	16.4
Abr	30	3.00	6.02	1.22	30	16.3	19.2	13.7	30	63	97	36	30	205	307	3	30	1015	1028	1002	30	4.2
May	31	3.53	9.46	3.12	31	19.7	22.3	17.7	31	52	69	27	31	187	253	61	31	1012	1018	1003	31	2.2
Jun	30	3.43	5.64	1.43	30	22.9	27.2	19.2	24	68	97	40	30	188	242	32	30	1012	1017	1005	30	44.6
Jul	31	3.18	5.88	1.70	31	26.2	28.5	23.1	31	80	97	57	31	197	229	126	31	1012	1016	1006	31	33.2
Ago	31	2.78	4.19	1.60	31	27.2	28.4	24.9	27	73	97	56	31	171	215	37	31	1011	1015	1007	31	12.2
Sept	30	2.84	4.56	1.84	30	23.8	29.2	20.1	29	60	82	31	30	144	206	21	30	1012	1020	1003	30	81.8
Oct	31	2.79	7.80	0.99	31	21.1	27.1	14.1	18	53	95	32	31	91	175	4	31	1013	1024	1004	31	222.4
Nov	30	2.41	5.87	0.61	30	17.1	19.8	13.6	30	82	99	40	25	46	82	2	30	1019	1025	1011	30	314.8
Dic	31	2.24	6.80	0.89	31	13.1	19.4	9.9	31	64	98	27	30	45	62	2	31	1024	1037	1013	31	123.2
																				TOTAL		922.4

Wind rose - WS SERPIS GANDÍA – 2024

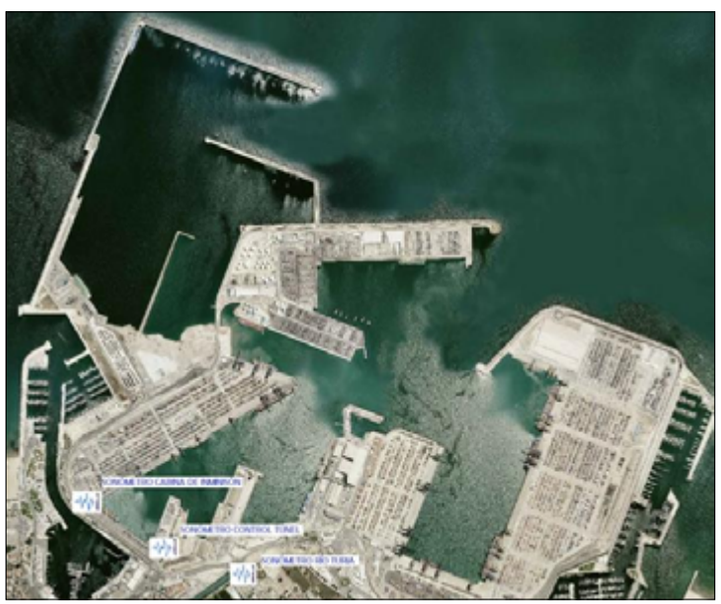


/ 6.3 Acoustic quality control network

The Port Authority of Valencia monitors and controls acoustic emissions from the port environment. In this regard, the monitoring of acoustic quality is another of the objectives that the Department of Ecological Transition has set as a priority.
To carry out this monitoring, the Port Authority of Valencia has had four sound level meters in operation since 2021:

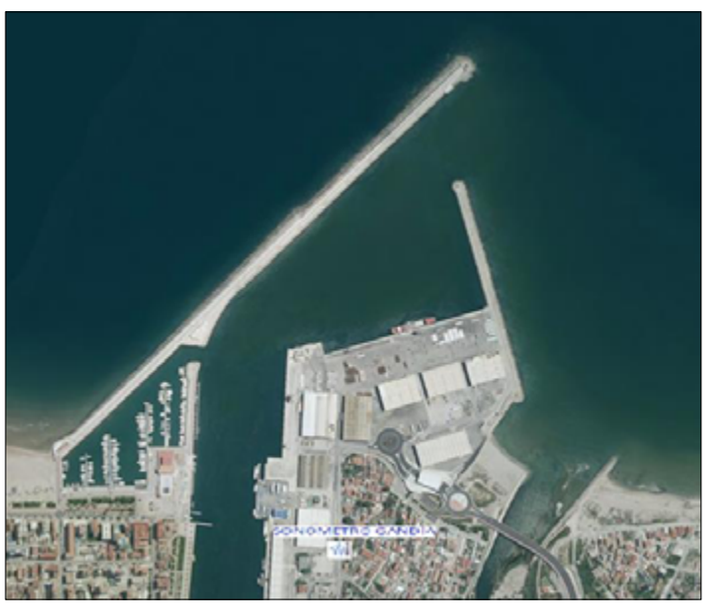
- **Port of Valencia: three sound level meters distributed strategically across the port-city interface, allowing us to analyse acoustic quality in real time.**
- **Port of Sagunto: sound level meter was located at the North Sagunto AQMS, the closest point of the port to the town of Sagunto.**
- **Port of Gandía: sound level meter located in front of the Venecia neighbourhood.**

The location of acoustic control terminals is shown in the following image:



Port of Valencia

Port of Sagunto

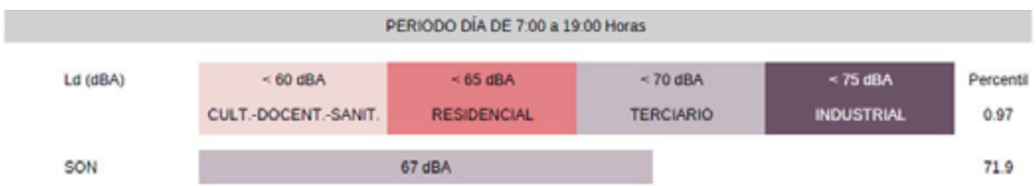


Port of Gandía

6.3.1 Results obtained in the year 2024 according to the benchmark regulation values

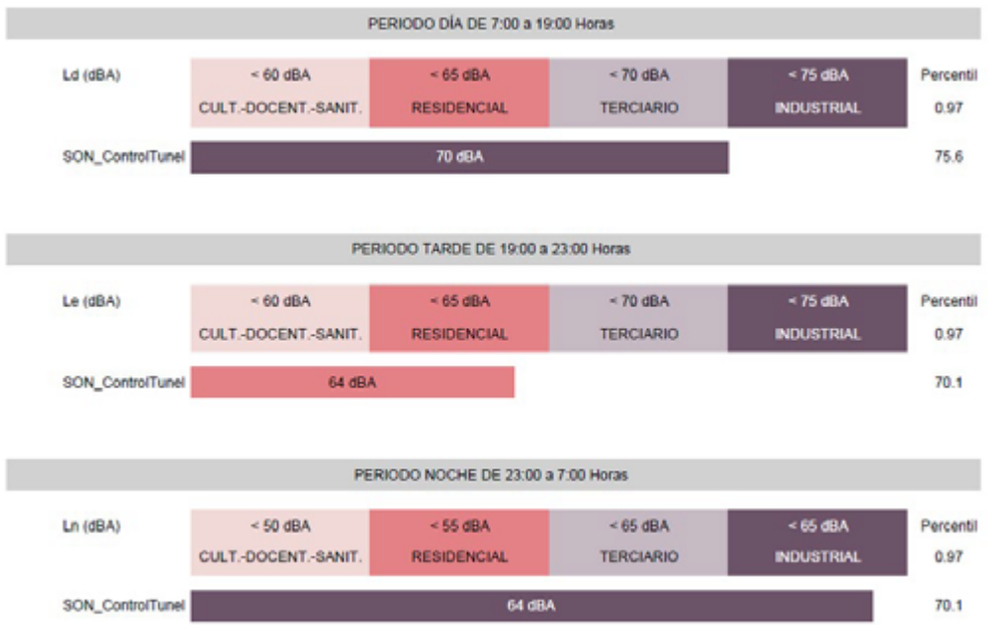
In 2024, monthly reports have been drafted on the trajectory of the data registered for the purpose of identifying trends. Presented below is a graphic evaluation per station of the 2024 annual average, using, as a reference, the acoustic quality objectives applicable to urbanised areas existing in Table A of Annex II of Royal Decree 1367/2007, of 19 October, developed Law 37/2003, of 17 December, in November, on Noise, for the 3 assessment periods (annual measure for the daytime and evening period must be below 75 dB and for the night period must be under 65 dB).

Sound level meter at Poniente Transversal Quay AQMS – 2024

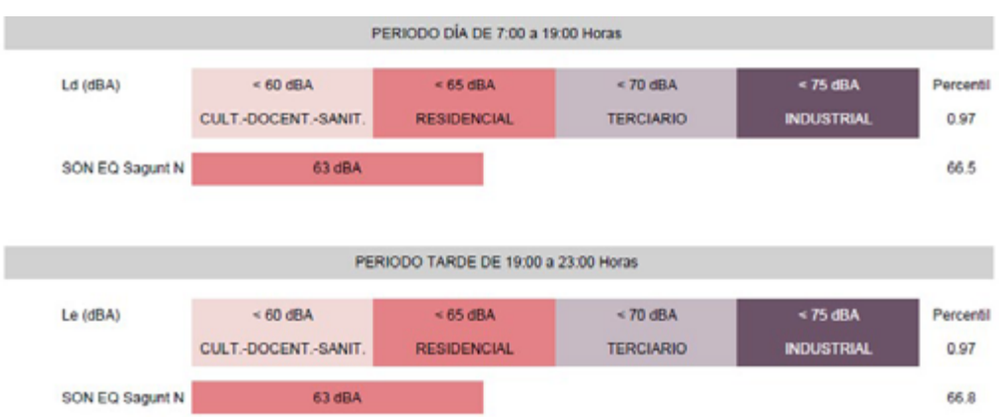


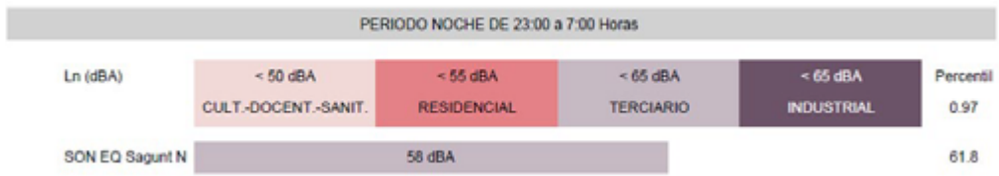
Sound level meter at Turia Riverbed AQMS – 2024

Sound level meter at VR Tunnel - Year 2024

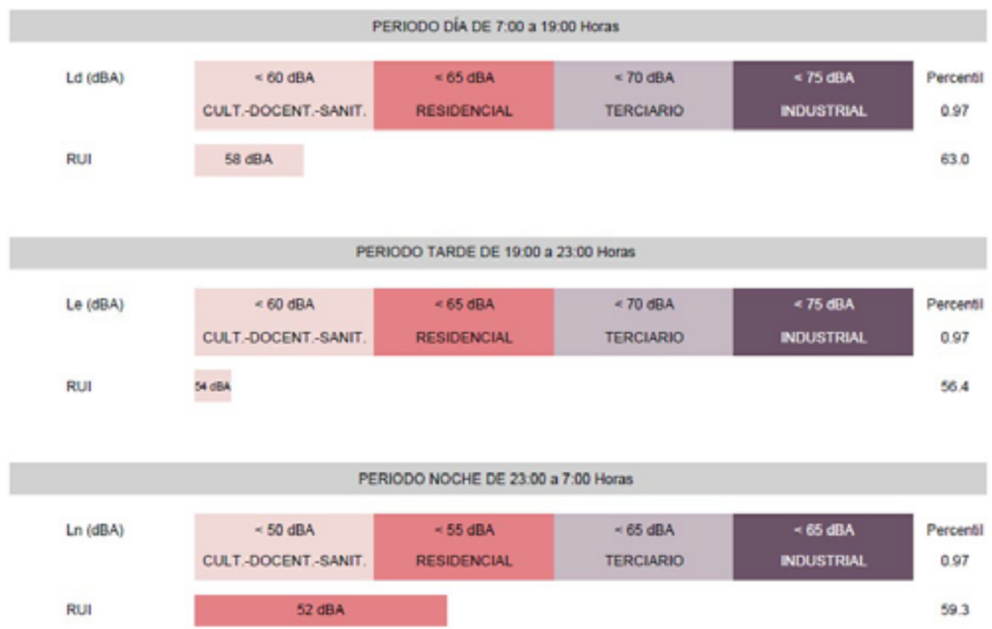


Sound level meter at North Sagunto AQMS - Año 2024





Sound level meter in Gandía - Year 2023(2024)



After the analysis of data in the annual period assessed (January-December 2024), it can be concluded that all stations measuring noise levels comply with the acoustic quality objectives for predominantly industrial sectors established in Royal Decree 1367/2007, of 19 October, developing Law 37/2003, of 17 November, on Noise, in relation to acoustic zoning, quality objectives and acoustic emissions.

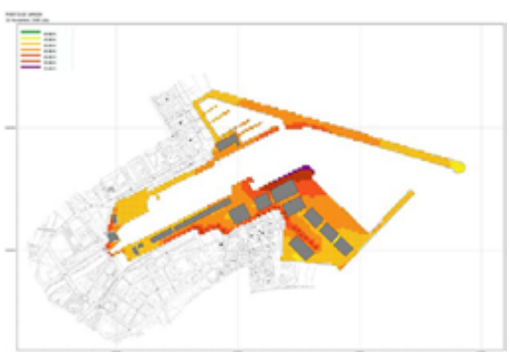
■ 6.3.2 "Static" acoustic maps

Some years ago, the Port Authority of Valencia drafted static acoustic maps of the ports of Gandía, Sagunto and Valencia. These maps were drafted with on-site measurements in different representative locations within the port premises and the corresponding noise maps were prepared on the basis of these measurements.

The result of these maps reflected that the effect of the noise generated in the Gandía, Sagunto and Valencia port environments was, in general, confined to the service area.

For the drafting of the static acoustic map of the Port of Gandía, measurements were taken at 32 10-minute control points in each hourly period. These measures were taken over two days; one with t he presence of vessels and the other in the absence thereof, in order to analyse the impact of their presence on the determination of noise levels in the area.

Subsequently, continuous measurements were taken over 24 hours at two representative control points close to the port-city interface.



L day (without vessels in port) Port of Gandía

L night (without vessels in port) Port of Gandía

These maps concluded that the noise levels emitted to the external atmosphere of the three acoustic areas in daytime, evening and night periods, measured over the 30 days of November and 1 December of 2009 were below the immission limit values for noise applicable to port infrastructures and activities established in Royal Decree 1367/2007 for sectors of the territory with predominantly industrial use land.

In all the "predictive" acoustic maps and in the successive updates of these maps, which are described in the following section, the campaigns of punctual measurements established by regulation are carried out to validate them.

■ 6.3.3 Acoustic "predictive" maps

From 2011, updates were made available for the predictive acoustic maps of the ports of Sagunto and Valencia, while in 2012, work began to update the predictive acoustic map of the port of Gandía, which was completed in late 2013. For these updates, the Predictor calculation programme version 8 was used, using the HARMONOISE NOMEPORTS model.

Subsequently, with the amendment of Annex II of Royal Decree 1513/2005, of 16 December, indicated in Order PCI/1319/2018, of 7 December, the calculation methods currently used for the assessment of industrial noise, aircraft noise, train noise and road traffic noise are replaced by a common calculation methodology developed by the European Commission through the project "Common Noise Assessment Methods in Europe (CNOSSOS-EU)". Therefore, in the 2020 and 2021 updates, according to the current regulations, the CNOSSOS model is used as the calculation method.

Port of Valencia

In the specific case of the port of Valencia, for its calculates, the initial information with which the 2008 map was drafted was updated and adapted to the new circumstances of the port: vehicle traffic on roads, type of activities carried out, acoustic level of machinery used in each area, timetables and shifts, etc.

Thus, and with all above information compiled, after a modelling process, the programme allowed for the drafting of a set of different maps, segregated by activities, timetables, etc., as a management tool for acoustic levels in the port environment. An analysis of these maps provided the following conclusions:

- **The most significant noise in the daytime-evening period is vehicle traffic**
- **The most significant noise in the night period is industrial noise.**
- **The railway has no significant impact on the noise levels of the Port.**

The compliance maps indicate that, with regard to the noise levels attributable to the port, at no point of the bordering urban area did noise levels exceed the values established by R.D. 1367/2007 for the daytime period, or the established for the night period.

In 2016, the predictive noise map of the port of Valencia was updated to include the new north extension. The maps prepared are presented below:

L day Port of Valencia

L afternoon Port of Valencia

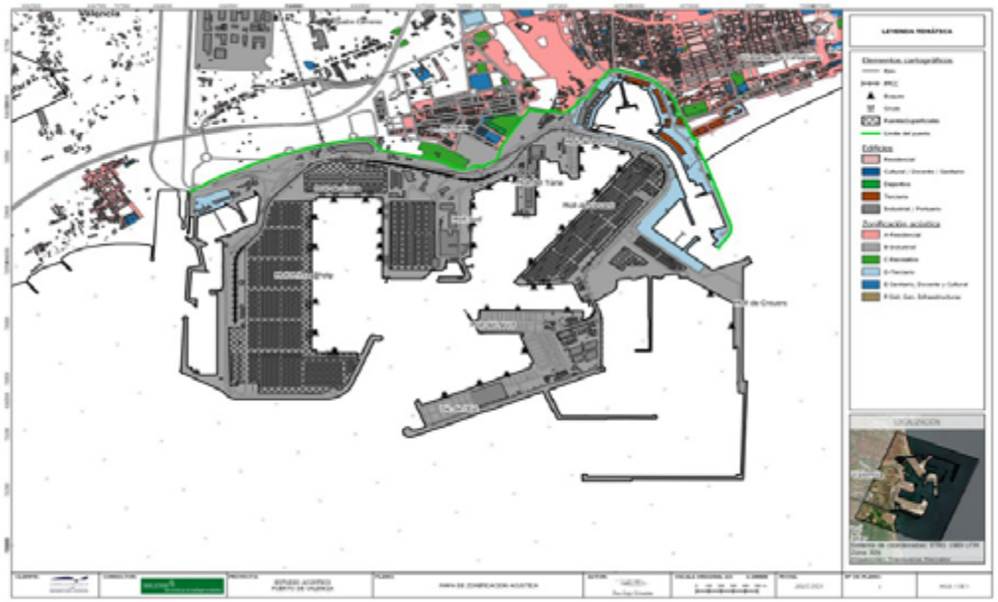
L night Port of Valencia

In 2020, a study was carried out with the amendments arising from the implementation of the Special Plan for South Zone 2 of the Port of Valencia. The following image shows the area of study and its environment. The red line represents the scope of PEZS2 and the blue line represents the area where the acoustic impact of the new developments was considered most relevant:

In none of the scenarios that were calculated did noise levels exceed current legislation for both industrial and built-up areas. As such, it is not necessary to apply additional corrective measures.

During 2021, the predictive maps for the port of Valencia were updated, taking into account the new infrastructures, sources and current traffic for the creation of these maps.

The acoustic zoning is shown in the following map.



The noise levels obtained in the calculations of noise levels due to port activity show that the limit values indicated in table A1 of annex III of RD 1367/2007 are not exceeded in the urban environment of the port. Furthermore, in the urban environment which, a priori, may have a higher acoustic impact from the port, such as the Nazaret neighbourhood due to its proximity to the port infrastructure, it has been confirmed that the road traffic circulating along the roads in this neighbourhood also has an existing acoustic impact in the area. A summary of the predictive maps is presented below:

Las principales conclusiones que se obtienen de los mapas de niveles sonoros y, la evaluación en fachada realizadas, son que las zonas residenciales más próximas a las infraestructuras portuarias, no se ven expuestas, por la actividad del puerto de Valencia, a niveles superiores a los valores límite fijados en la tabla A1 del anexo III del RD 1367/2007.

L day Port of Valencia

L afternoon Port of Valencia

L night Port of Valencia

The main conclusions obtained from the noise level maps and the evaluation of the façade are that the residential areas closest to the port infrastructures are not exposed, due to the activity of the port of Valencia, to levels higher than the limit values set out in table A1 of annex III of RD 1367/2007.

Furthermore, it is concluded that the predominant source of noise in the day and evening periods is road traffic on the roads running through the port, which is mostly heavy vehicle traffic. Ships and industrial sources have a more moderate impact, however, in the night period the contribution of industrial sources increases due to the decrease in road traffic. Rail traffic has a minimal impact on the environment.

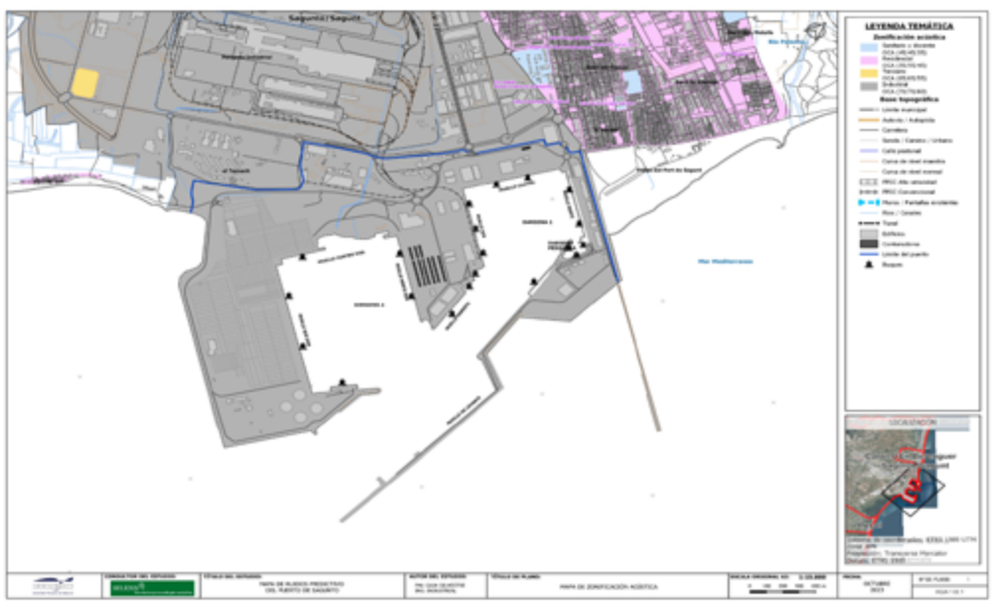
However, in no case are the limit values set out in table A1 of Annex III of RD 1367/2007 exceeded.

Likewise, an evaluation of the acoustic impact due to road traffic on the roads around the port has been carried out, reaching the conclusion that port activity does not imply, in most of the dwellings, a transmission of sound levels higher than those already existing in the nearest residential buildings, due to road traffic on the city's roads in any of the three evaluation periods.

Port of Sagunto

In 2023, the predictive noise map of the port of Sagunto was updated. In line with current legislation, three periods (day, evening and night) are established for the presentation of the noise impact in the corresponding bands. The maps prepared are presented below:

- **The acoustic zoning is shown in the following map:**



Ld total port of Sagunto

Ln total port of Sagunto

Ld total port of Sagunto

The principal conclusions reached from the above sound level maps is that residential areas close to port infrastructures are not exposed to levels above those established in table AD1 of Annex III of RD 1367/2007 due to the activity of ports.

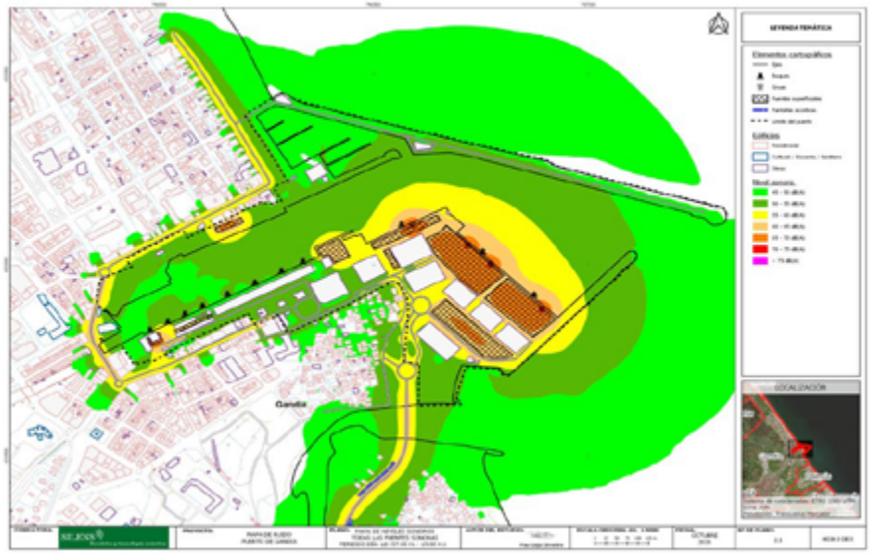
Port of Gandia

In 2013, the first predictive study was carried out with the new extension planned at the port of Gandía, and the day and night period maps were published. As a conclusion, it has been shown that the sound levels obtained in the prediction do not exceed the acoustic quality objectives defined in Law 7/2002 of the Regional Government of Valencia on neighbouring and nearby areas.

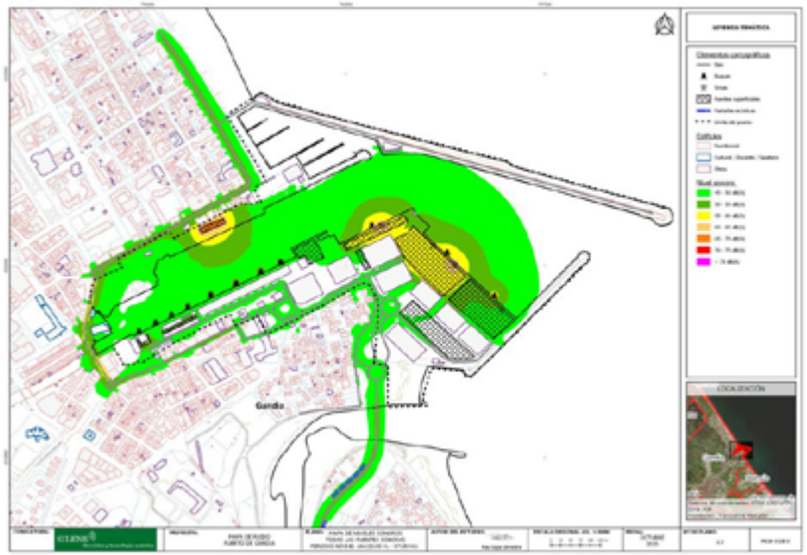
In 2019, the updating of the predictive acoustic map of the Port of Gandía began due to the new road access entrance to the port, which avoids heavy vehicles having to cross the city to access the port. The results of the study, completed in October 2020, are presented below:

Acoustic zoning map:

Acoustic maps for the port of Gandía including all existing sources:



L Day Gandía Port



L Night Gandía Port

L Afternoon Gandía Port

In terms of the variations detected with respect to the 2013 map, the main change with this update is the new south entrance with the section of the N-337 motorway that connects the N-332 with the entrance. This means that heavy vehicles have changed their access routes, eliminating the need to pass through the centre of Gandía. In acoustic terms, it is noted that a reduction of 5 dB was recorded from the levels shown in the 2013 map.

From the analysis of the thresholds set out in RD 1367/2007 and the noise maps drafted, it can be observed that said thresholds were not exceed in any period in the residential areas surrounding the port of Gandía.

/ 6.4 Water quality

■ 6.4.1 Quality of water bodies in the port premises

The Water Directive (2000/60/EC) establishes that the Member States must protect, improve and regenerate all surface water bodies, with the aim of reaching good condition for these water bodies no more than 15 years after the entry into force of the Directive, that is the year 2015. In the case of artificial or heavily modified water bodies, such as the case of the ports of Valencia, Sagunto and Gandía, the Directive determines that the Member States must protect and improve them for the purpose of reaching good ecological condition and good chemical status, all in accordance with the guidelines established in Royal Decree 817/2015 of 11 September, establishing the monitoring and assessment criteria on the state of surface water and the environmental quality standards.

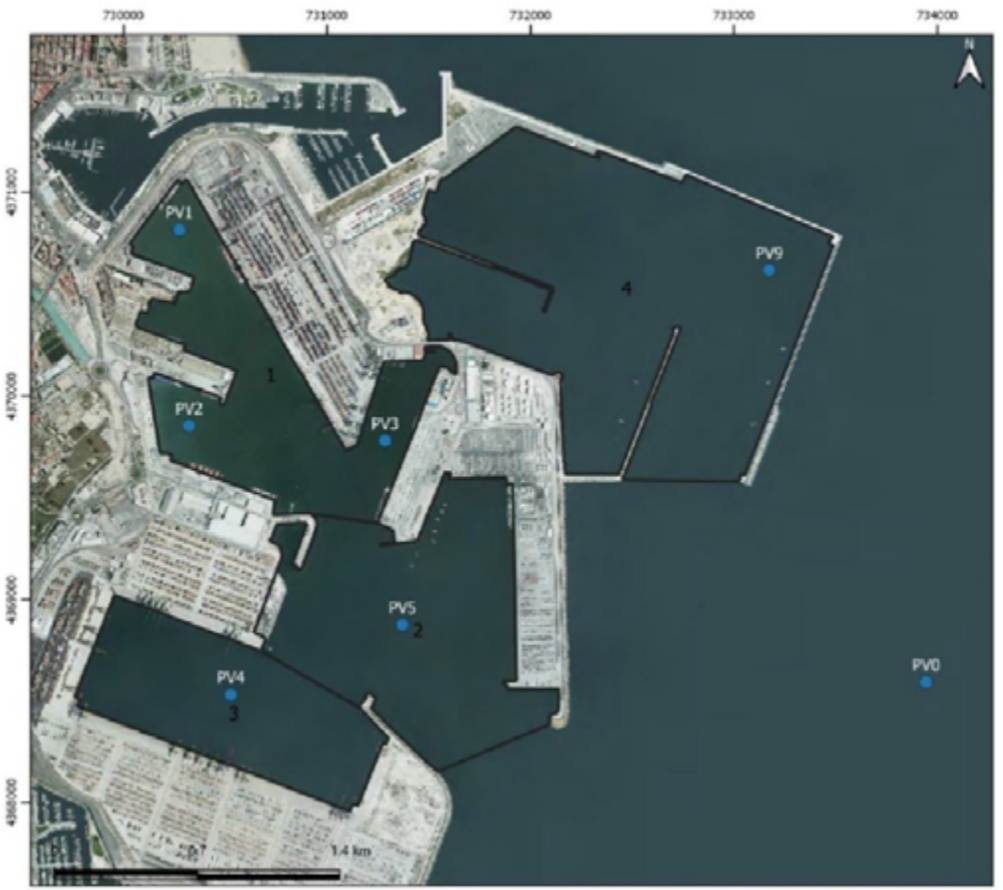
In 2013, the document ROM 5.1-13 was published on the "Coastal water quality in port areas" (hereinafter ROM 5.1-13) drafted by Puertos del Estado, compiling the standards and protocols for the analysis and assessment of intra-port bodies of water. This document is compatible with Royal Decree 817/2015 is specifically drafted for the extension of ports, the reason for which the PAV is implementing said methodology in the three port premises it manages for the assessment of the environmental quality of the waters.

■ 6.4.2 Areas of study

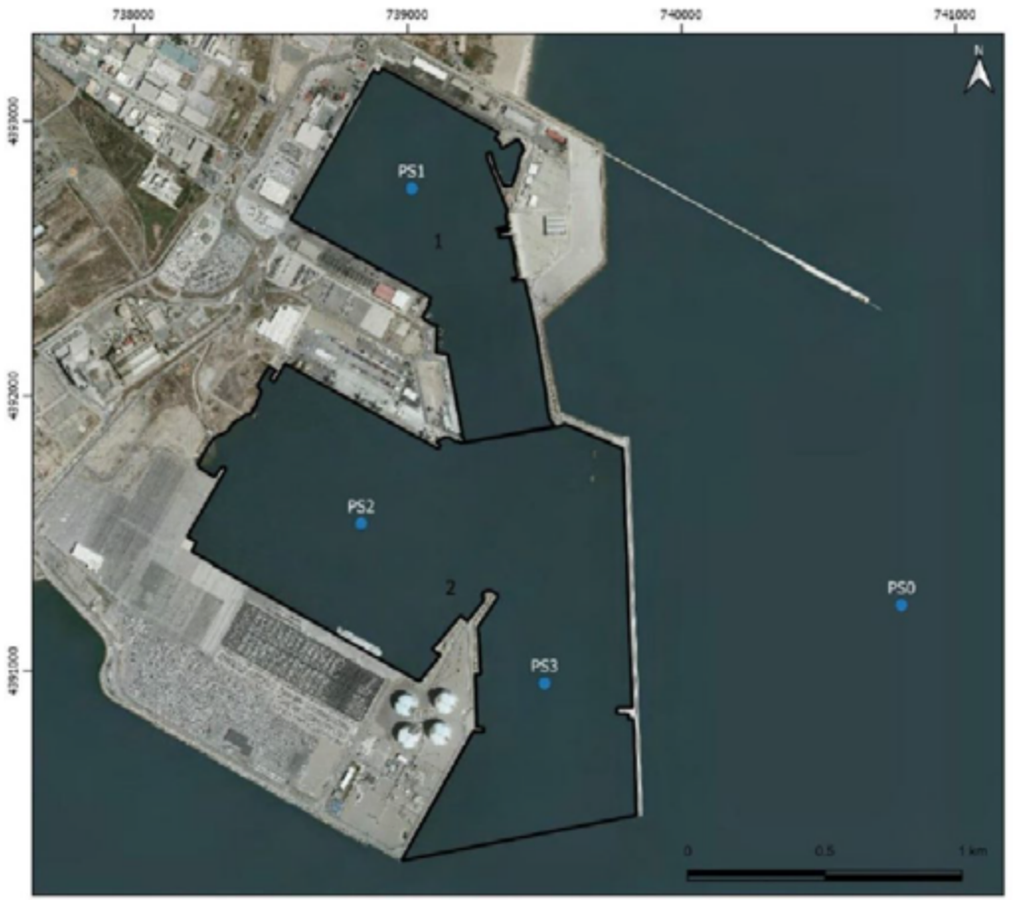
In the year 2024, periodic sampling campaigns were carried out for the control of the quality of waters in the ports managed by the Port Authority of Valencia:

The area of study includes both intra-port waters (water bodies heavily modified due to the presence of ports), and a control station located outside the ports, representing the extra-port waters (coastal water body) at each port.

The locations of the control points established for the ports of Valencia, Sagunto and Gandía are displayed below:



Distribution of sampling points in the Port of Valencia



Distribution of sampling points in the Port of Sagunto

Distribution of sampling points in the Port of Gandía

6.4.3 Determination of the port aquatic management units (pamus)

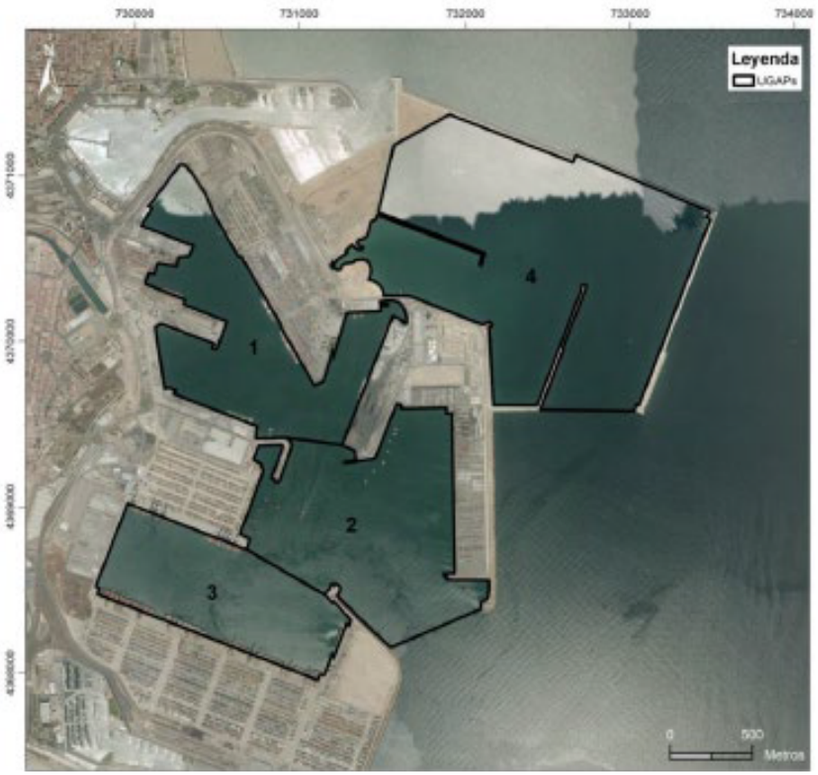
To assess the environmental quality of port waters, following the criteria established in the ROM 5.1-13, the Port Aquatic Management Units (hereinafter PAMUs) were delimited and defined as a an instrument for the planning of the aquatic environment of the Port Services Zone (PSZ). In this context, these PAMUs, constituted as basic units for the management of port water quality and have been created in accordance with the following aspects:

- **Uses and activities carried out in the PSZ**
- **Physical and hydro-morphological characteristics**
- **Hydrodynamic conditions**

All PAMUs have been classified as:

PUERTO	UGAP	CATEGORÍA	CLASE	TIPO
VALENCIA	UGAP-1	AGUAS COSTERAS	AGUAS MUY MODIFICADA	CM3: AGUAS COSTERAS MEDITERRÁNEAS DE RENOVACIÓN BAJA
	UGAP-2	AGUAS COSTERAS	AGUAS MUY MODIFICADAS	CM3: AGUAS COSTERAS MEDITERRÁNEAS DE RENOVACIÓN BAJA
	UGAP-3	AGUAS COSTERAS	AGUAS MUY MODIFICADAS	CM3: AGUAS COSTERAS MEDITERRÁNEAS DE RENOVACIÓN BAJA
	UGAP-4	AGUAS COSTERAS	AGUAS MUY MODIFICADAS	CM3: AGUAS COSTERAS MEDITERRÁNEAS DE RENOVACIÓN BAJA
SAGUNTO	UGAP-1	AGUAS COSTERAS	AGUAS MUY MODIFICADAS	CM3: AGUAS COSTERAS MEDITERRÁNEAS DE RENOVACIÓN BAJA
	UGAP-2	AGUAS COSTERAS	AGUAS MUY MODIFICADAS	CM3: AGUAS COSTERAS MEDITERRÁNEAS DE RENOVACIÓN BAJA
GANDIA	UGAP-1	AGUAS COSTERAS	AGUAS MUY MODIFICADAS	CM3: AGUAS COSTERAS MEDITERRÁNEAS DE RENOVACIÓN BAJA

Indicated below are the PAMUs considered for each port:



PAMU established for the Port of Valencia

PAMU established for the Port of Sagunto

PAMU established for the Port of Gandía

6.4.4 Variables studied

The monitoring of the intra-port water quality was conducted based on the indicators considered for environmental quality assessment in ROM 5.1.13 which are, for each of the PAMUs, the following:

- **FC sediment quality indicators: Organic Quality Index (OQI)**
- **Biological water quality indicators: phytoplankton (concentration of chlorophyll a) and benthic invertebrates (BOPA)**
- **FC water quality indicators: turbidity, oxygen saturations, total hydrocarbons, faecal contamination and nutrients.**
- **Chemical quality of water and sediment: priority substances and other contaminants**

For the classification of the ecological potential and chemical state of the water bodies, monitoring has been carried out on the biological and physio-chemical indicators in the case of ecological potential, and through the analysis of priority substances and other contaminants in the case of chemical state.

The parameters analysed in 2024 are detailed below:

MATRIX	MEASURESIN SITU	LABORATORY ANALYSIS	SAMPLING POINTS
WATER COLUMN	• Chlorophylla • Temperature • Salinity • Dissolved oxygen • Turbidity • Total hydrocarbons	• Faecal contamination E. coli and intestinal enterococci. • Nutrients: nitrates, nitrites, ammonium and phosphates.	PORT VALENCIA: PV1, PV2, PV3, PV4, PV5, PV9 AND PV0. PORT SAGUNTO: PS1, PS2, PS3 Y PS0. PORT GANDÍA: PG1, PG2, PG3 Y PG0.
SEDIMENT	Redox potential	• Total organic carbon • Kjeldahl nitrogen • Total phosphate • Benthic fauna of invertebrates (BOPA)	PORT VALENCIA: PV2, PV3, PV4, PV5, PV9, PV0. PORT SAGUNTO: PS1, PS2, PS3, PS0. PORT GANDÍA: PG1, PG2, PG3, PG0.

Variables analysed for study of ecological potential

MATRIX	LABORATORY ANALYSIS	SAMPLING POINTS
WATER COLUMN	Perfluorooctanesulfonic acid and derivatives (PFOS), Aclonifen, a-HCH, b-HCH, d-HCH, Lindane, Alachlor, Aldrin, Dieldrin, Endrin, Isodrin, Atrazine, Bifenox, Cybutryne, Cypermethrin, Chlorfenvinphos, Chlorpyrifos, Dichlorvos, Dicofol, Diuron, Endosulfan, Hexabromocyclododecane (HBCDD), Hexachlorobenzene, Isoproturon, p,p'-DDT, Pentachlorobenzene, Pentachlorophenol, Quinoxyphene, Simazine, Add DDT total, Terbutryn, Trifluralin, Brominated diphenyl ethers, Chloroalkanes, Benzene, Hexachlorobutadiene, Tetrachloroethene, Carbon tetrachloride, Trichloroethene, 4-n-Nonylphenol, 4-terc-Octilfenol, Bis (2-ethylhexyl) phthalate, Anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k) fluoranthene, Benzo(ghi)perylene, Indene(1,2,3-cd)pyrene) Fluoranthene, Naphthalene, Cadmium, Mercury, Nickel, Lead, 1,2-Dichloroethane, Dichloromethane, Heptachlor, Heptachlor epoxide, Trichlorobenzenes, Tributyltin (TBTs), Chloroform.	PORT VALENCIA: PV5 Y PV9. PORT SAGUNTO: PS1 Y PS3. PORT GANDÍA: PG1 Y PG3.
SEDIMENT	Anthracene, Benzo (a) anthracene, Benzo(a)pyrene, Benzo(g,h,i)perylene, Chriseno, Phenanthrene, Fluoranthene, Indene, Pyrene, Arsenic, Cadmium, Copper, Chromium VI, Mercury, Nickel, Lead, Zinc, PCB 18, PCB 28, PCB 31, PCB 44, PCB 52, PCB 66, PCB 95, PCB 101, PCB 105, PCB 110, PCB 118, PCB 138, PCB 149, PCB 153, PCB 156, PCB 170, PCB 180, PCB 187, PCB 194, Compounds of tributyl tin (TBTs).	PORT VALENCIA: PV5 Y PV9. PORT SAGUNTO: PS1 Y PS3. PORT GANDÍA: PG1 Y PG3.

Variables analysed for study of ecological potential

The "in-situ" measurements of the different hydrological variables were taken continuously throughout the water column, using high-precision CTD oceanographic probe (model SBE 19 plus v2). The laboratory tests were performed by an ENAC accredited laboratory.

Detailed below are the sampling and analysis methods of he variables studied:

PARAMETER	UNITS	SAMPLING LEVEL	SAMPLING METHOD	ANALYSIS METHOD
TEMPERATURE	ºC	WATER COLUMN PROFILE	MULTIPARAMETER PROBE SBE 19PLUS V2	THERMOMETRY
SALINITY	PSU	WATER COLUMN PROFILE	MULTIPARAMETER PROBE SBE 19PLUS V2	CONDUCTIMETRY
DISSOLVED OXYGEN	MG/L Y % SAT.	WATER COLUMN PROFILE	SBE 43 SENSOR COUPLED TO MULTIPARAMETER PROBE SBE 19PLUS V2	POLAROGRAPHIC
METHOD	NTU	PERFIL COLUMNA DE AGUA	SENSOR SEAPOINT ACOPLADO A SONDA MULTIPARAMÉTRICA SBE 19PLUS V2	NEFELOMETRÍA
TURBIDITY	NTU	WATER COLUMN PROFILE	SEAPOINT SENSOR COUPLED TO SONDA MULTIPARAMETER PROBE SBE 19PLUS V2	NEPHELOMETRY
CHLOROPHYLL A	MG/L	WATER COLUMN PROFILE	CYCLOPS -7 SENSOR COUPLED TO MULTIPARAMETER PROBE SBE 19PLUS V2	FLUOROMETRICS

In situ measurement methods.

PARAMETER	UNIT	TESTING PROCEDURE
NITRATES	mg/l	COLORIMETRY
NITRITES	mg/l	COLORIMETRY
AMMONIUM	mg/l	SPECTROPHOTOMETRY
PHOSPHATES	mg/l	COLORIMETRY
E.COLI	UFC/100 ML	FILTRATION, INCUBATION AND RECOUNTS
INTESTINAL ENTEROCOCCI	UFC/100 ML	FILTRATION, INCUBATION AND RECOUNTS
ALACHLOR	µg/l	GAS/MASS CHROMATOGRAPHY
ANTHRACENE	µg/l	GAS/MASS CHROMATOGRAPHY
ATRAZINE	µg/l	GAS/MASS CHROMATOGRAPHY
BENZENE	µg/l	GAS/MASS CHROMATOGRAPHY
BROMINATED DIPHENYL ETHERS	µg/l	GAS/MASS CHROMATOGRAPHY
CADMIUM	µg/l	ICP/MASS SPECTROSCOPY
CARBON TETRACHLORIDE	µg/l	GAS/MASS CHROMATOGRAPHY
CHLOROALKANES C10-13	µg/l	GAS/MASS CHROMATOGRAPHY
CHLORFENVINPHOS	µg/l	GAS/MASS CHROMATOGRAPHY
CHLORPYRIFOS (CHLORPYRIFOSSETHYL)	µg/l	GAS/MASS CHROMATOGRAPHY
ALDRIN	µg/l	GAS/MASS CHROMATOGRAPHY
DIELDRIN	µg/l	GAS/MASS CHROMATOGRAPHY
ENDRIN	µg/l	GAS/MASS CHROMATOGRAPHY
ISODRIN	µg/l	GAS/MASS CHROMATOGRAPHY
DDT TOTAL (ADD DDT, DDD AND DDE)	µg/l	GAS/MASS CHROMATOGRAPHY
PP-DDT	µg/l	GAS/MASS CHROMATOGRAPHY
1,2-DICHLOROETHANE	µg/l	GAS/MASS CHROMATOGRAPHY
DICHLOROMETHANE	µg/l	GAS/MASS CHROMATOGRAPHY
DI (2-ETHYLHEXYL) PHTHALATE (DEHP)	µg/l	GAS/MASS CHROMATOGRAPHY
DIURON	µg/l	CHROMATOGRAPHY LIQUID-MASS
ENDOSULFAN	µg/l	GAS/MASS CHROMATOGRAPHY
FLUORANTHENE	µg/l	GAS/MASS CHROMATOGRAPHY
HEXACHLOROBENZENE	µg/l	GAS/MASS CHROMATOGRAPHY
HEXACHLOROBUTADIENE	µg/l	GAS/MASS CHROMATOGRAPHY
HEXACHLOROCYCLOHEXANES	µG/L	CROMATOGRAFÍA GASES/MASAS

PARAMETER	UNIT	TESTING PROCEDURE
(α-HCH, β-HCH, δ-HCH, Lindane)	µg/l	GAS/MASS CHROMATOGRAPHY
ISOPROTURON	µg/l	CHROMATOGRAPHY LIQUID-MASS
LEAD AND ITS COMPOUNDS	µg/l	ICP/MASS SPECTROSCOPY
MERCURY AND ITS COMPOUNDS	µg/l	ATOMIC FLUORESCENCE
NAPHTHALENE	µg/l	GAS/MASS CHROMATOGRAPHY
NICKEL AND ITS COMPOUNDS	µg/l	ICP/MASS SPECTROSCOPY
NONYLPHENOLS (4-NONYLPHENOL)	µg/l	GAS/MASS CHROMATOGRAPHY
OCTIFENOLS ((4-(1,1',3,3'-TETRAMETHYLBUTYL) -FENOL))	µg/l	GAS/MASS CHROMATOGRAPHY
PENTACHLOROBENZENE	µg/l	GAS/MASS CHROMATOGRAPHY
PENTACHLOROPHENOL	µg/l	GAS/MASS CHROMATOGRAPHY
BENZO(A)PYRENE	µg/l	GAS/MASS CHROMATOGRAPHY
BENZO(B)FLUORANTHENE	µg/l	GAS/MASS CHROMATOGRAPHY
BENZO(K)FLUORANTHENE	µg/l	GAS/MASS CHROMATOGRAPHY
BENZO(G,H,I)PERYLENE	µg/l	GAS/MASS CHROMATOGRAPHY
INDENE(1,2,3-CD)PYRENE.	µg/l	GAS/MASS CHROMATOGRAPHY
SIMAZINE	µg/l	GAS/MASS CHROMATOGRAPHY
TETRACHLOROETHYLENE	µg/l	GAS/MASS CHROMATOGRAPHY
TETRACHLOROETHYLENE	µg/l	GAS/MASS CHROMATOGRAPHY
TRIBUTYLTIN COMPOUNDS (TRIBUTYLTIN CATION)	µg/l	GAS/MASS CHROMATOGRAPHY
TRICHLOROBENZENES	µg/l	GAS/MASS CHROMATOGRAPHY
TRICHLOROMETHANE	µg/l	GAS/MASS CHROMATOGRAPHY
TRIFLURALIN	µg/l	GAS/MASS CHROMATOGRAPHY
DICOFOL	µg/l	GAS/MASS CHROMATOGRAPHY
QUINOXYFEN	µg/l	CHROMATOGRAPHY LIQUID-MASS
PERFLUOROOCTANESULFONIC ACID AND ITS	µG/L	CROMATOGRAFÍA LIQUIDO/MASAS
COMPOUNDS (PFOS)	µg/l	CHROMATOGRAPHY LIQUID-MASS
ACLONIFEN	µg/l	GAS/MASS CHROMATOGRAPHY
CYBUTRYNE	µg/l	CHROMATOGRAPHY LIQUID-MASS
CYPERMETHRIN	µg/l	GAS/MASS CHROMATOGRAPHY
DICHLORVOS	µg/l	CHROMATOGRAPHY LIQUID-MASS
HEXABROMOCYCLODODECANE (HBCDD)	µg/l	GAS/MASS CHROMATOGRAPHY
HEPTACHLOR	µg/l	GAS/MASS CHROMATOGRAPHY
HEPTACHLOR EPOXIDE	µg/l	GAS/MASS CHROMATOGRAPHY
TERBUTRYN	µg/l	GAS/MASS CHROMATOGRAPHY
ETHYLBENZENE	µg/l	GAS/MASS CHROMATOGRAPHY
TOLUENE	µg/l	GAS/MASS CHROMATOGRAPHY
1,1,1-TRICHLOROETHANE	µg/l	GAS/MASS CHROMATOGRAPHY
XYLENES (ADD O, M, P)	µg/l	GAS/MASS CHROMATOGRAPHY
TERBUTHYLAZINE	µg/l	GAS/MASS CHROMATOGRAPHY
ARSENIC	µg/l	ICP/MASS SPECTROSCOPY
COPPER	µg/l	ICP/MASS SPECTROSCOPY
CHROMIUM VI	µg/l	COLORIMETRY
SELENIUM	µg/l	ICP/MASS SPECTROSCOPY
ZINC	µg/l	ICP/MASS SPECTROSCOPY
ZINC	µG/L	ESPECTROSCOPIA ICP/MASAS

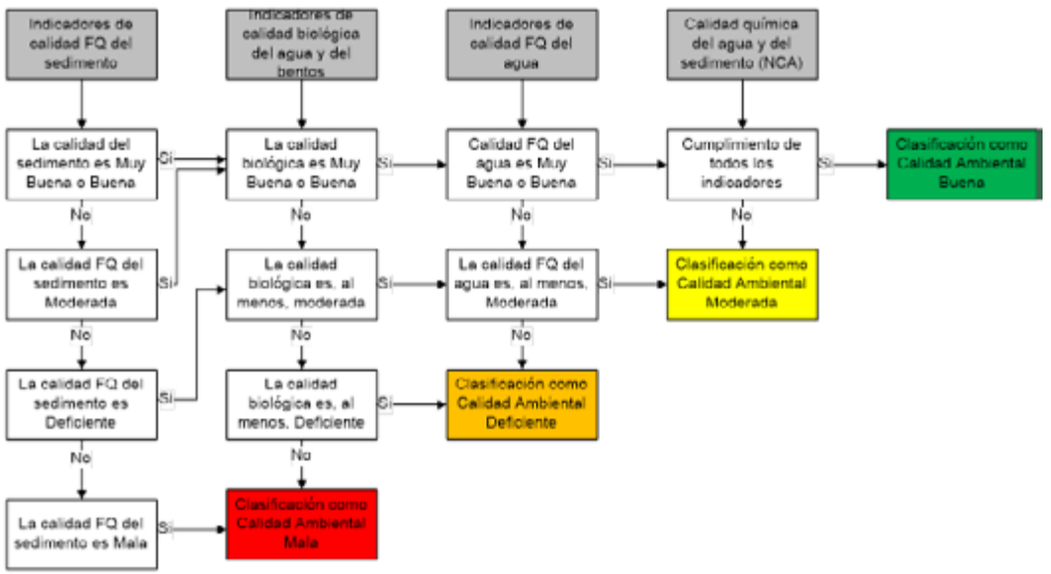
Laboratory test methods for water samples

PARAMETER	UNITS	ANALYSIS METHOD
COT	MG/KG	CATALYSED COMBUSTION. NON-DISPERSIVE INFRA-RED
KJELDAHL NITROGEN	MG/KG	KJELDAHL DISTILLATION
TOTAL PHOSPHATE	MG/KG	INDUCTIVELY COUPLED PLASMA (ICP)
ORGANIC MATERIAL	MG/KG	DICHROMATE OXIDATION
GRANULOMETRY	%	LASER DIFFRACTION
METALS: CADMIUM, LEAD, COPPER, NICKEL, ZINC, ARSENIC, CHROMIUM VI	MG/KG	INDUCTIVELY COUPLED PLASMA (ICP)
MERCURY	MG/KG	ATOMIC ABSORPTION SPECTROMETRY
POLYCHLORINATED BIPHENYLS (PCBS)	MG/KG	GAS/MASS CHROMATOGRAPHY
COMPOUNDS AND TRIPHENYLTIN (TBTS)	MG/KG	GAS/MASS CHROMATOGRAPHY
HAPS	MG/KG	GAS/MASS CHROMATOGRAPHY
BENTHIC FAUNA OF INVERTEBRATES (BOPA)	IND/M2	OPTICAL MICROSCOPY

Laboratory test methods for sediment samples.

■ 6.4.5 Water quality monitoring results

The environmental quality of the heavily modified PAMUs is assessed based on the hierarchical integration of the quality elements indicated below:



As observed, the final classification of the bodies of water may be: Good, Moderate, Deficient or Poor.

The results obtained for each PAMUIN 2024 and port are displayed below with the different indicators:

Puerto	UGAP	Potencial Ecológico			Estado químico	CLASIFICACIÓN DE LA CALIDAD AMBIENTAL
		Indicadores de calidad FQ del sedimento	Indicadores de calidad biológica del agua y del bentos	Indicadores de calidad FQ del agua	Calidad química del agua y del sedimento	
VALENCIA	UGAP 1	N/A	MÁXIMO	MODERADA	N/A	MODERADA
	UGAP 2	N/A	MÁXIMO	BUENA	BUENA	BUENA
	UGAP 3	N/A	MÁXIMO	MODERADA	N/A	MODERADA
	UGAP 4	N/A	MÁXIMO	BUENA	BUENA	BUENA
SAGUNTO	UGAP 1	N/A	MÁXIMO	BUENA	BUENA	BUENA
	UGAP 2	N/A	MÁXIMO	BUENA	BUENA	BUENA
GANDÍA	UGAP 1	N/A	MÁXIMO	BUENA	NO ALCANZA EL BUENO	MODERADO

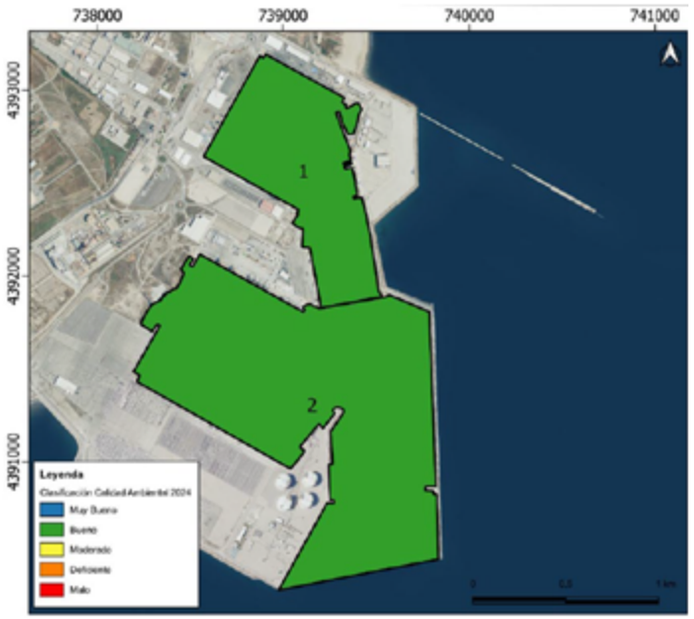
ENVIRONMENTAL QUALITY ASSESSMENT RESULTS 2024

The results show that the environmental quality rating is:

- **Port of Valencia: Good for PAMU 2 and PAMU 4, and Moderate for PAMU 1 and PAMU 3.**
- **Port of Sagunto: Good for PAMU 1 and PAMU 2.**
- **Port of Gandía: Moderate for PAMU 1.**

The results obtained for each PAMU and port are displayed below with the different indicators:

Results of PAMU Evaluation at the Port Of Valencia.



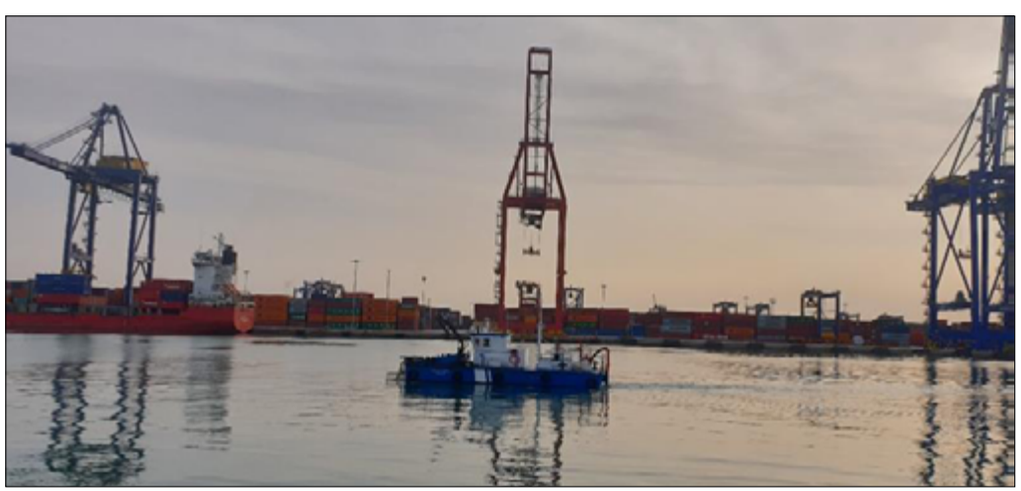
Results of PAMU Evaluation at the Port Of Sagunto.

Results of PAMU Evaluation at the Port Of Gandía

The PAV also works to minimise the possible effects on water quality through initiatives such as that to allow for the cleaning of floating waste from the water mirror. In 2003, the Maritime Security and Rescue Society, part of the Directorate-General of the Merchant Navy, transferred the vessel LIMPIAMAR III to the Port Authority of Valencia, which assumes responsibility for the service, which is currently provided through a private company.

Said vessel has the mission, fundamentally, of collection of solid and liquid water waste, and to contribute to the service to combat episodes of accidental marine pollution, which will be considered another unit.

In the 2024 period, through LIMPIAMAR III, a total of 2.86 tons of floating waste, mainly plastic, wood and derivatives were removed and managed.



/ 6.5 Dredging management

As a result of the sedimentation of sands and silts in the inbound channels to the ports and the construction of new piers, the Port Authority of Valencia periodically conducts dredging work for maintenance based on the needs for access and manoeuvrability of the ports managed.

No dredging operations were completed at the ports of Sagunto, Valencia, and Gandía in 2024.

/ 6.6 Environmental monitoring plan

Since 2008, works have been conducted on the Extension project of the Port of Valencia. These works follow the instructions of the Environmental Impact Statement (EIS) of the Project of 30 July 2007, with the complete Environmental Monitoring Plan with the aim of ensuring compliance with the corrective and preventive measures Construction and Operating phase, and ensuring that the impact levels do not exceed those in the impact assessment.

With the aim of complying with the prescriptions included in the EID, the Plan in execution for several years, included the monitoring of the following environmental factors:

- **Quality of water and sediments**
- **Marine biocenosis**
- **Fishing resources**
- **Evolution of seafood resources**
- **Monitoring of avifauna**
- **Atmospheric pollution**
- **Noise pollution**
- **Monitoring of archaeological prospecting**
- **Coastal dynamics.**

Complementing the above monitoring, during 2008, and in order to comply with instructions of the EID, a study was carried out on the potential effect of the Project for the Dispersion of the Discharge from the Cabañal Spillway and the Vera Emissary, concluding that there was no effect on the initial situation.

In April 2012, the first phase of the works on the extension were completed. The principal result was the confinement of the waters of the new dock. In August 2012, the work began on the project "Cruise Liner Quay - Phase I", which was completed in the year 2013.

The environmental monitoring of the vectors mentioned previously continued in the year 2023, simultaneously with the development of the works carried out.

From the start-up of the works, and therefore, the planned Environmental Monitoring Plan, in the year 2008, and taking into account the data obtained and reflected in the existing annual reports at that time, the conclusion reached was that the environmental impact of the actions corresponding to the North Extension of the Port of Valencia were within the margins provided for and therefore there was no significant effect on the environment.

/ 6.7 Soil management

From the the Ecological Transition Area, environmental control of the concessions is conducted, through which the following actions are taken:

- Compilation of the Reports of the Soil Situation of concession-holders/authorised companies subject to the provisions of Article 2 of Royal Decree 9/2005, of 14 January, establishing the list of potentially soil contaminating activities and the criteria and standards for the declaration of contaminated soils, before the competent environmental body. File of concessionary and authorised companies updated with the CNAE-2009 code of their activities.
- Request for the most detailed complementary reports, data or analysis that allow for soil contamination to be assessed, in accordance with the provisions established in Article 3.3 of the Royal Decree, which the environmental authority has requested, ex oficio or through the Integrated Environmental Authorisation.
- Report, through the Internal Feasibility Reports of the PAV, on the obligations companies must fulfil in relation to the soil.
- At the legislative level, the changes in the new Law 7/2022 of 8 April on waste and contaminated soils for a circular economy have been incorporated. In this regard, the information provided to the corresponding department on the soil requirements that must be included in all concessions and authorisations granted to companies within the port public land domain has been updated.

/ 6.8 Visual impact

This year, the Port Authority of Valencia continues, once again, to pay special attention to the maintenance of green areas in the interior of the port premises. In the year 2024, the total surface green area of the Port of Valencia was approximately 39,612.95 m^2 of which 21,600.00 m^2 was pasture 18,012.95 m^2 cultivation with no pasture.

In the Port of Gandía, the total occupied surface area of the gardens and green area to maintain is 1,675.00 m^2, broken down as follows: 425,00 m^2 of grass pasture and 1.250,00 m^2 of maintenance and conservation gardening wooded areas, shrubs, creeping plants and flower, palm species, hedges, etc. The total surface area occupied by gardens and green areas to maintain in the Port of Sagunto is 7,369.00 m^2, broken down as follows: 3,059.00 m^2 of pasture and grass and 4,310.00 m^2 of maintenance and conservation of gardens, trees, shrubs, creeping plants and flowers, palm species, hedges, etc.

Sprinkler irrigation and automatic drip are used for the maintenance of green areas, contributing the reduction of water consumption.

/ 6.9 Mobility plan

Given the need to update the existing studies in the field of mobility in the Commercial Port of Valencia, the PAV proceeded in July 2022 to the preparation of a Diagnostic Study of Sustainable Mobility to Work in the Commercial Port of Valencia in which the existing reality was reflected and, in 2023, as a next step, a new SUSTAINABLE TRANSPORT TO WORK PLAN IN THE COMMERCIAL PORT OF VALENCIA (hereinafter PTST) is being prepared to serve as a reference instrument that regulates and manages mobility in itinere of the PCV, which is expected to be completed in 2024.

The overall aim of the PTST is to optimise the efficiency and sustainability of travel for employees and users of the PCV, seeking to reduce vehicle congestion, minimise pollutant emissions and improve accessibility. It is further elaborated upon in the specific objectives:

1. Promote mobility by sustainable modes, mainly through non-motorised modes.
2. Reduce the use of private vehicles, through a more rational use of them.
3. Encourage the use of collective transport, either urban transport or through collaborative transport.
4. Improve the conditions of universal accessibility, both in the access routes and inside the building.
5. To raise awareness among the port community to the advantages of sustainable mobility in terms of quality of life, health and the environment.

In accordance with the problems identified and the objectives of the PTST, the following 5 strategic lines have been proposed:

- **STRATEGIC LINE 1: ENCOURAGE THE USE OF PUBLIC TRANSPORT:** Encourage and strengthen the preference for public transport, reducing reliance on individual vehicles and promoting more efficient and sustainable travel.
- **STRATEGIC LINE 2: ENCOURAGE PEDESTRIAN-CYCLE MOBILITY:** Promote and facilitate the use of bicycles/VMPs and walking as modes of transport, improving accessibility and contributing to a more active, healthy and environmentally friendly mobility.
- **STRATEGIC LINE 3 BOOST ELECTRIC MOBILITY:** Encourage the adoption of electric vehicles, reducing polluting emissions and promoting cleaner and more sustainable technologies in daily mobility
- **STRATEGIC LINE 4 IMPROVE ROAD TRAFFIC MANAGEMENT:** Implement strategies to optimise traffic flow and safety, reducing congestion and improving vehicle travel efficiency.
- **STRATEGIC LINE 5 OPTIMISE MOBILITY MANAGEMENT:** To coordinate and improve, on a glabal basis, the different aspects of mobility, integrating innovative solutions to ensure efficient, sustainable and adaptive management to the changing needs of the port environment.

/ 6.10 Other actions

The specific actions carried out in 2023 were the following:

- Monitoring of the existing sewerage network in the port of Valencia.
- Cat control service. This service is provided by the PAV for the non-concessioned and non-authorised area in the ports of Valencia, Sagunto and Gandía. In the period between 2021 and 2024, a total of 199 animals have been sterilised between the three ports.

7. EMERGENCY RESPONSE

7. EMERGENCY RESPONSE

The main aim of the Port Authority of Valencia is to make the ports of Sagunto, Valencia and Gandía areas with the greatest guarantees of security, as well as to provide more effective collaboration with other administrations with competencies in police, civil protection, fire prevention, rescue and pollution control.

For this reason, and in defence of the public interest, it is necessary to make compatible the outstanding increase in port traffic that is being registered in the Ports of its competence, with the maintenance of the integrity of people, the environment, infrastructures and goods.

To fulfil this goal, the Port Authority has a Port Police Service, a Fire Brigade in close collaboration with the Valencia Town Council, oil pollution control equipment with specialised personnel, and a medicalised ambulance, among other operational resources, active twenty-four hours a day, three hundred and sixty-five days a year. The coordination of resources, as well as with other administrations called upon to intervene, is carried out from the Emergency Control Centre.

From this Centre, the Port Authority supervises operations with dangerous goods, manages emergencies and cooperates in the preventive routines of industrial, operational, labour and environmental safety in the ports of Sagunto, Valencia and Gandía, both on land and in port waters.

INCIDENTS	2020	2021	2022	2023	2024
URGENT HEALTH CARE	186	231	271	270	213
TOTAL DISCHARGES	22	33	13	36	26
SMALL DISCHARGES OF SEA ORIGIN	6	17	6	20*	15
SMALL DISCHARGES OF LAND ORIGIN (SPILLS)	16	16	7	16	11
COLLECTION OF OBJECTS	18	9	22	13	36
CLOSURE OF THE PORT	15	8	23	10	9
FIRES OR OUTBREAKS	8	6	8	10	12

(*) 11 spots of non-hydrocarbon substances were accounted for here

The personnel and teams of the Control Centre are on permanent alert to intervene immediately in any incident that may occur. In the meantime, there are constant operations for the maintenance of equipment, improvement of procedures and training of personnel, implementation of technological innovations, etc...

In this training effort, the exercises and drills that are periodically carried out are key. The following have been carried out in 2024:

DRILLS	2020	2021	2022	2023	2024
1. PAV EMERGENCY PLANS					
1.1.- LED BY THE PAV:	**0**	**2**	**5**	**6**	5
FIRE		1	5	4	5
HYDROCARBON SPILL		-	-	2	-
OTHER		1	-	-	-
1.2. IN COLLABORATION WITH OTHER ORGANISATIONS	**0**	**1**	**3**	**5**	2
IN DIFFERENT TERMINALS			2	3	1 (1)
IN COLLABORATION WITH OTHER ENTITIES		1	1	2	1 (2)
2. IN TERMS OF PROTECTION:	**13**	**19**	**21**	**22**	14
TOTAL	13	22	29	33	21

(1) Oil spill drill at the Tepsa dock. Outdoor Emergency Plan.

(2) Drill of arrival of a vessel with a positive Maritime Health Declaration. Public health incident. External Health.

8. INNOVATION AND COOPERATION PROJECTS

For the implementation of responsible and innovative environmental policies in the ports managed by the PAV, it is essential to acquire knowledge, both at a theoretical and practical level. This knowledge is gained through participation in cooperation and innovation projects. The PAV participates in these projects both directly, by implementing the results obtained in the projects directly in its own management, and indirectly, by making the knowledge acquired available to third parties for implementation in their facilities.

The PAV fosters participation, both its own and that of the companies that form part of the Port Community, in all those innovative programmes and projects the purposes of which are in line with those set out in the Environmental and Energy Policy. This participation provides up-to-date knowledge of the latest trends, techniques and technologies available in the control and monitoring of the environmental situation of the ports it manages, as well as the gradual introduction of technologies for the energy transition towards more sustainable operations both in ports and in the companies that form part of the Port Community.

/ 8.1 Projects completed

To date, the PAV has participated in the following projects. From 2010 onwards they are detailed with more information:

- ***PROJECT ECOPORT (1998)*** - LIFE Programme of the European Commission
- ***PROJECT INDAPORT (2000)*** - Programme for the Promotion of Technological Research (PROFIT) of the Ministry of Science and Technology.
- ***PROJECT HADA (2002)*** - LIFE Programme of the European Commission
- ***PROJECT ECOPORTS (2002)*** - Fifth Framework Programme of the European Commission
- ***PROJECT SECURMED (2004)*** - European Commission Interreg IIIB Programme
- ***PROJECT HADA (2005)*** - LIFE Programme of the European Commission
- ***PROJECT MADAMA (2005)*** - Interreg IIIB Medocc Programme of the European Commission
- ***PROJECT NOMEPORTS (2005)*** - LIFE Programme of the European Commission
- ***PROJECT ELEFSINA BAY 2020 (2007)*** - LIFE Programme of the European Commission
- ***PROJECT ECO- LOGISTYPORT (2008)*** - Empleaverde Programme of the European Social Fund
- ***IMPROVED ENVIRONMENTAL MANAGEMENT IN THE PORTS OF THE GULF OF HONDURAS (2008)*** - Funds from the Inter-American Development Bank and the Spanish Cooperation.
- ***EFICONT (2009)*** - National R&D&I Plan of the Ministry of Public Works.
- ***PROJECT CLIMEPORT (2009)*** - MED Programme of the European Commission
- ***GREENCRANES PROJECT (2012)*** - Transport Network Programme (TEN-T)
- ***GREENBERTH PROJECT (2013)*** - MED Programme
- ***MONALISA 2.0 PROJECT (2013)*** - Trans-European Transport Network Executive Agency Programme

SEA TERMINALS PROJECT (2014)

The SEA TERMINALS (Smart, Energy Efficient and Adaptive Port Terminals) project had a budget of 6,273,896 € and 50% EU funding through its TEN-T programme. The project lasted 22 months.

The project was coordinated by the Valenciaport Foundation and involved the PAV, Noatum, Terberg, NACCO, the Instituto Tecnológico de la Energía (ITE), EDAE, Ampliatel, Baltic Ports Organization and the Italian Ministry of Infrastructures and Transport, as well as the Port Authority of Livorno, Global Service Srl, Offshore LNG Toscana and the Scuola Superiore di Sant'Anna (Italy) as executing agencies.

SEA TERMINALS aimed to drive the evolution of the port industry towards a progressive and efficient low carbon operating model, integrating smart and energy efficient technologies (hybrid machine concepts, liquefied natural gas as fuel, heavy duty electric vehicles) through innovative energy efficiency and business solutions, focusing on heavy duty machinery and equipment handling.

SEA TERMINALS took as a starting point the lessons learned from the GREENCRANES project, which has already been mentioned above.

The project ended in December 2015.

GAINN4SHIP INNOVATION PROJECT (2015)

The GAINN4SHIP INNOVATION project (LNG Technologies and Innovation for Maritime Transport for the Promotion of Sustainability, Multimodality and Efficiency of the Network), has a budget of € 15,025,564 and 50% EU funding through its CEF (Connecting Europe Facility) programme.

GAINN4SHIP INNOVATION aims to implement European environmental regulations through the conversion of the Diesel engines to LNG (Liquefied Natural Gas) engines of a Fast-Ferry vessel providing regular service in the Canary Islands. This project includes the final engineering projects on the prototype LNG-fuelled vessels and their adaptation to a real vessel.

Some results obtained from this study are as follow:

- Definition of environmental indicators for LNG-fuelled vessels,
- Definition of technical solutions for fuel intake;
- Control of methane emissions to the atmosphere from LNG-fuelled prototype vessels;

The project ended in March 2018

GAINN4MOS PROJECT (2015)

The GAINN4MOS project (Sustainable LNG Operations for Ports and Shipping - Innovative Pilot Actions), had a budget of € 41,314,934 and 50% EU funding through its CEF (Connecting Europe Facility) programme.

GAINN4MOS aimed to improve the Motorways of the Sea (MOS) network in 6 Member States (Spain, France, Croatia, Italy, Portugal and Slovenia) by carrying out engineering studies for the rehabilitation of existing vessels and/or new construction, development of LNG port infrastructure, refuelling stations and a large set of pilot projects.

GAINN4MOS included 14 detailed engineering studies on LNG infrastructure and bunkering stations and ship conversion and/or newbuilding and 11 prototypes (4 ship conversions and 7 LNG bunkering stations at nodal ports).

The project ended in September 2019.

CORE LNG AS HIVE PROJECT (2014)

The CORE LNG LNG Operations project (for Ports and Shipping - Innovative Pilot Actions), had a budget of € 33,295,760 and 50% EU funding through its CEF (Connecting Europe Facility) programme.

The main purpose of this project is to provide Spain and Portugal with an adequate infrastructure and operational framework for the deployment of a global supply network for liquefied natural gas (LNG) for transport use in the context of the network formed by the Mediterranean and Atlantic corridors, and the connecting area through the Strait of Gibraltar.

The project consortium is composed of representatives from different status (public or private) and different sectors (energy, education, transport...), thus allowing the consideration of different interests and ensuring the market-oriented approach of the actions included in the proposal.

Pilot actions to be implemented include:

- Adaptation of the SAGGAS terminal in the port of Sagunto to supply LNG to ships as fuel.
- Basic project for the conversion from diesel to LNG of a tugboat.
- Basic project for the installation of an LNG/CNG supply plant in the port of Valencia.

The project ended in December 2021.

ECCLIPSE PROJECT (2019)

European Project for the Assessment of Climate Change in Ports in south-western Europe (ECCLIPSE), led by the Valenciaport Foundation, co-financed by the European Commission through the Interreg V-B Southwest Europe Programme and in which the Port Authority of Valencia also participates. It has a budget of € 1,045,253.00 and is financed by the Interreg Sudoe programme.

The main purpose of ECCLIPSE is to define a common methodology for analysing the impacts of climate change and its effects on the maritime-port environment.

To achieve this goal, early prediction tools and models have been developed to allow a thorough understanding of their impact on a local scale.

The project will also contribute to raising awareness of the impact of climate change and will define transnational strategies for prevention, adaptation and action in the SUDOE area (South-West Europe) that can minimise its effects.

The project ended in April 2023.

GREEN-C-PORTS PROJECT (2019)

The Green and Connected Ports (GREEN C PORTS) project is led by the Valenciaport Foundation and funded by the European Commission's Connecting Europe Facility (CEF) Programme. This project has a total budget of €7,175,700, 50% of which will be financed by the Commission.

GREEN C PORTS has the overall goal of providing a set of digitisation tools and technologies to support the environmental sustainability of ports and the performance of port operations in the TEN-T network.

This project will address six business cases consisting of prototypes and pilot tests that will be implemented in different European ports and will serve as a basis for testing innovative technologies such as IoT, big data or predictive analytics through artificial intelligence models.

The project ended in December 2023.

EALING- OPS PROJECT (2020)

European flagship Action for coLd ironING in ports (EALING) is led by the Valenicaport Foundation and financed by the European Commission's Connecting Europe Facility (CEF). This project has a total budget of €7,290,800, of which 50% will be financed by the Commission.

EALING - OPS is a European project that expresses the need to accelerate the effective rollout of solutions for electricity connection for vessels (OPS) in the ports of the EU and it proposes the following objectives:

- Assess operational and environmental functioning participating ports, for the supply to different ships (ro-ro, ro-pax, container ships, ferries);
- Contribute to the continued progress of an EU framework that is harmonised and interoperable to deploy OPS infrastructure in accordance with the EU's technical, legal and regulatory guidelines.
- Conduct the vital technical, environmental, socio-economic, and financial studies to hasten the works phase on OPS infrastructure.
- Implement OPS infrastructure and equipment in at least 16 EU ports belonging to different sea basins: Mediterranean, Black Sea, Atlantic and North Sea.

The project ended in December 2023

/ 8.2 Development projects

H2PORTS PROJECT (2019)

"H2PORTS - Implementing Fuel Cells and Hydrogen Technologies in Ports" is a project coordinated by the Valenciaport Foundation, in close collaboration with the Port Authority of Valencia, and funded by the Fuel Cell and Hydrogen Joint Undertaking (FCH JU) programme. It has a budget of nearly 4 million euros and 50% financing.

H2PORTS aims to provide efficient solutions to facilitate a rapid evolution from a fossil fuel-based industry to a low-carbon and zero-emission sector.

Within the framework of the project, three pilot projects will be tested in the Port of Valencia: a reach stacker for loading/unloading and transporting containers, powered by hydrogen; a terminal tractor for ro-ro operations,

powered by hydrogen cells and a mobile hydrogen supply station that will provide the fuel necessary to guarantee the continuous working cycles of the aforementioned equipment and which in the initial phase of the project will work in the Grimaldi (Valencia Terminal Europa) and MSC terminals at the Port of Valencia.

The project will end in December 2025.

PROJECT EALING – Works Valenciaport (2020)

The EALING - Works Valenciaport Project: Preparation of the electrical grid of the Port of Valencia for Onshore Power Supply is led by the Valenicaport Foundation and financed by the European Commission's Connecting Europe Facility (CEF). This project has a total budget of €8,593,050, 20% of which will be financed by the Commission.

EALING - Works Valenciaport has the aim of preparing the electricity network of the port for Onshore Power Supply to container ships, ferries and cruise liners in the new terminals of the Port of Valencia (new container terminal and new passenger terminal). For this purpose, during the project, a new Gas-Insulated Switchgear (GIS) electricity substation will be built with an initial capacity of 45MW (extendible to 90MW in the future). The action also includes the works to install a new underground electricity line that will connect the substation to the general grid. Both interventions will allow the supply of OPS at the Port of Valencia in situations of high demand.

This project is scheduled for completion in December 2024.

RENMARINAS PROJECT VALENCIAPORT (2023)

The RENMARINAS DEMOS Programme is an initiative of the Ministry for Ecological Transition and the Demographic Challenge, managed through the Institute for Energy Diversification and Saving (IDAE), which aims to grant aid for investment in test platforms and port infrastructures for marine renewables, both in the Spanish maritime-terrestrial public domain and in Spanish port waters.

The initiative is framed within component 7 "Deployment and integration of renewable energy" of the Recovery, Transformation and Resilience Plan.

The RENMARINAS VALENCIAPORT project consists of the creation of a platform for the demonstration of technologies that use the marine environment to produce electrical energy. Specifically, there is the collaboration with Bluenewables for the development of a 1 megawatt floating photovoltaic park; and also Enermarport in the creation of a 270 kilowatt device to obtain electrical energy from waves.

The intention is to install the wave energy system in the northern area of the Valencian dock, while the floating photovoltaic park would be located in the southern area.

The project will end in June 2026, although the pilots will continue to be operational for another two years after this date

RENEWPORT PROJECT (2024)

The RENEWPORT project funded by INTERREG EURO MED funds, aims to tackle CO2 emissions by supporting the clean energy transition of Mediterranean ports and transforming them from pollutant and greenhouse gas emitting centres to clean energy centres, exploiting the untapped potential of renewable energy sources.

In order to achieve this end, a toolkit will be developed to provide practical advice, guidance and calculations of the potential use of renewable energy sources for ports, based on their energy needs. This will provide ports with a robust solution to plan their transition to clean energy.

Moreover, the project partners will test the use of these sources, as well as green hydrogen sources, in different scenarios. This will not only improve the performance of port operations in terms of climate change and air quality, but the lessons learned in this project will also lead to the definition of a tool for ports as clean energy hubs; a solution that is reproducible in other ports.

The project partners will establish a long-term cooperation network in clean energy transition, with the objective of transferring the results at local, transnational and macro-regional levels. They will also seek to establish strong cooperation with other projects of similar scope.

The project will end in September 2026.

/ 8.3 Company shareholdings

As part of the objectives included in its Environmental Policy, the PAV is committed to disseminating and collaborating with third parties, so as to share the knowledge accumulated in the protection of the port environment and facilitate the extension of environmental management in other areas. Therefore, it participates in cooperation projects in which, through the contribution of this knowledge, it contributes to environmental improvement.

Participation in the MEDPORTS Association

In June 2018, the MEDPorts association, which brings together twenty of the main ports and state port organisations in the Mediterranean, was formed and held its first General Assembly, at which its main objectives were defined: to promote collaboration between Mediterranean ports to meet the new challenges of international trade and logistics and to highlight the centrality and importance of the Mediterranean in the new global trade flows, among others.

The founding members of MEDPorts are the ports of Barcelona, Tarragona, Algeciras and Valencia (Spain); Civitavecchia, Taranto and Venice (Italy); Marseille-Fos and Toulon (France); Luka Koper (Slovenia); Arzew, Skikda and Bejaia (Algeria); Tanger MED (Morocco); Damietta (Egypt); Beirut (Lebanon); and Malta Freeport (Malta), as well as the state agencies Puertos del Estado (Spain); the Office de la Marine Marchande et des Ports (Tunisia); and Serport (Algeria).

For this purpose, the association has created six working committees dedicated to Training, Sustainability, Security, Relations with International Institutions, Market Analysis and Smart Ports, with the Port Authority of Valencia being represented on all of them. In addition, the Port Authority of Valencia shares the presidency of the Sustainability Committee with the port of Civitavecchia.

In 2022 the Port Authority of Valencia participated in the meetings of the Executive Committee and the Sustainability Committee, as well as in the General Assembly, which were held at different times during the year

/ 8.4 Training

As stated in the environmental policy, the PAV endeavours to facilitate appropriate training and awareness-raising in environmental matters, understood not only as a system for improving staff knowledge, but also as a means of acquiring new skills and abilities to make the ports of Sagunto, Valencia and Gandía more competitive.

Information mails

A series of environmental advice emails are sent monthly to both PAV staff and posted on the employee web ports, and the concession holders in the ports of the PAV.

9. COMMUNICATION AND PUBLICATIONS

The proximity of the Port Authority of Valencia to its different stakeholders allows it to be aware of their demands and concerns and serves as a basis for designing and developing specific actions for the fulfilment of the commitments undertaken. One of the purposes is to facilitate access to information to the maximum number of professionals and organisations in the fields in which it operates.

/ 9.1 Communication

In order to facilitate this knowledge, the PAV has different communication channels aimed at the different stakeholders. In particular, the following may be highlighted.

Website of the Port Authority of Valenica

The PAV website (www.valenciaport.com) continues to be one of the organisation's most important platforms for public communication in different areas, including the environment.

/ 9.2 Specific environmental information talks

During 2024, the PAV has continued to maintain permanent communication with institutions, clients and interested parties on the environmental activities of our ports.

With regard to the PAV, 276 visits have been made, including a section on the Environment, which has meant the attendance of a total of approximately 10,309 people from.

/ 9.3 Collaboration and attendance at forums, and seminars

In 2024, the PAV took part in a large number of conferences and seminars on the environment in relation to ports, both nationally and internationally. Those worth mentioning in this regard include:

- Lecture at the ENERTIC congress (Madrid, October 2024)
- Academic lectures at UNCTAD (Buenos Aires, November 2024)
- Paper at the National Congress on the Environment (Madrid, November 2024)
- Master's in Port Management and Intermodal Transport 32nd Edition - Fundación Valenciaport (Valencia, May 2024).

/ 9.4 Publications

The publications produced by the PAV include monographs and guides on specific subjects, as well as publications to disseminate information on the activities carried out. A distinction must be made between those published this year and those published before 2024.

PUBLICATIONS OF 2024

Environmental Report 2023

As a key element of environmental communication, once again this year the Port Authority of Valencia has published the Environmental Report which includes the environmental actions carried out during 2023.

PUBLICATIONS BEFORE 2024

Publications published in previous years by the PAV include:

PAV REPORT: Sustainable port

The Port Authority of Valencia has drafted a report on the main landmarks achieved in relation to the environment and energy, and its contribution to actions carried out in line with the Sustainable Development Goals (SDGs) approved by the UN in the 2030 Agenda for Sustainable Development.

Environmental Sustainability Report

The Environment Department of the Port Authority of Valencia has developed an Environmental Sustainability Report on the activities carried out in the port areas of the three ports under its jurisdiction, in order to have a comprehensive view of the environmental actions carried out by the Authority: Sagunto, Valencia, and Gandía.

PAV Projects Progress Report

The Port Authority of Valencia has drawn up a report on the evolution of the Ecoport project from its inception in 1998 to the present day, and on the projects in which it has participated, with the aim of compiling and compiling all the available environmental information.

Guidance for the Calculation and Management of the Carbon Footprint in Port Facilities by Levels

This guide has been published with the aim of supporting port companies in calculating and reducing their greenhouse gas emissions and has been drawn up by a team from the Port Authority of Valencia (PAV), the Polytechnic University of Valencia and the Valenciaport Foundation, which has been working on it for the last year.

The extensive document consists of a methodology for the calculation and management of the carbon footprint adapted to the needs of the port community and based on the study of good energy-environmental practices and successful energy efficiency projects of the last 8 years implemented in the ports of Valencia, Sagunto and Gandía.

The Guide proposes the inventory and study of the different sources of greenhouse gas emissions corresponding to direct emissions, which are those produced by the consumption of fossil fuels, and indirect emissions or emissions from electricity consumption. It also includes other emissions from terminal operations.

Living the port environmentally, a journey through the ports of Sagunto, Valencia and Gandía

The Port Authority of Valencia, aware of the social, economic and environmental value of the ports of Sagunto, Valencia and Gandía, commissioned the book "Living the Port Environment", to communicate its responsible management of these historic spaces, vital for the development of both the municipalities in which they are located and their citizens, workers and employees, through their environmental protection and their integration into the society to which they belong.

With this book, the PAV provides a transparent and integrated vision of all the actions it carries out for the sustainable development of its ports, so that port activities comply with the highest levels of respect and current environmental protection without compromising its future economic, social and environmental capacity.

E4Port Guide for the Implementation of Tiered Energy Management Systems in Port Facilities

This guide provides a specific methodology for the assessment of significant energy aspects applicable to port activities, as well as a three-level management model for the implementation of energy management systems for concessionary companies and port service providers pursuant to the current reference standards.

ECOPORT Guide for the Implementation of Tiered Environmental Management Systems in Port Facilities.

The Port Community is made up of a large number of companies of different sizes, environmental situations and activities, so that the adoption of an Environmental Management System may involve different efforts and difficulties for each of them. With the idea of facilitating the access and participation of companies in this project and taking into account the characteristics of each one of them, the Port Authority has developed a guide that structures the requirements of an Environmental Management System in line with the ISO14001 standard and the EMAS II regulation into 5 levels.

According to this methodology, each company is assessed according to its environmental situation, starting from the level that best suits it and progressively working towards higher levels until reaching the last level that guarantees the definitive implementation of an Environmental Management System, which allows them easy and low-cost access to the implementation of such a system.

Eco-efficiency Guidelines

The Port Authority of Valencia (PAV) has published five Eco-efficiency Guides with the main objective of promoting sustainability criteria in companies in the port areas managed by the PAV: Sagunto, Valencia, and Gandía. The guidelines include various proposals and actions that allow the production of goods and services while consuming fewer natural resources and, as a consequence, reduce pollution through ecologically and economically efficient procedures. These Guidelines have been drawn up after a thorough study of Eco-efficiency and Sustainability in the ports managed by the PAV and allow the application of eco-efficiency criteria in the following fields of action: energy eco-efficiency, preparation of an inventory of greenhouse gases, water use, waste generation and the use of materials in the execution of works.

Guide to environmental risk assessment in port facilities

This guide aims to be an easy to use and effective tool for those companies located in the ports of Sagunto, Valencia and GANDIA that wish to carry out their own environmental risk assessment according to the UNE 150.008 standard.

Good environmental practice guides

As part of the ECOPORT project, a series of Good Environmental Practice Guides in Ports was published in 2000 with the aim of raising awareness among the different groups working in port areas of the importance of applying environmentally friendly criteria in their daily work. Each of these Guides is dedicated to a specific port activity and provides useful tips to be applied to the typical processes of each activity, as well as legislation applicable to each specific case. The following Guides have been published so far:

- Offices (published in 2000, reprinted in 2006 and 2009)
- Workshops (published in 2000, reprinted in 2006 and 2009)
- Land Road Transport (published in 2004 and reprinted in 2009)
- Handling and Storage of Solid Bulk (published in 2005 and reprinted in 2009)

Port Authority of Valencia Environmental Reports (annual since 2001)

The publication in 2002 of the first Environmental Report of the Port Authority of Valencia (the first in the Spanish port system), brought together all the actions that had been carried out in this area during 2001, in an attempt to take a step forward and fulfil a firm intention to inform society as a whole within the process of continuous improvement in which the PAV is immersed.

Since then and in consecutive years, the Port Authority of Valencia has been publishing these Reports, which recognise the institution's special interest in consolidating its commitment to respect and care for the environment, setting out the main activities related to the protection of the environment carried out in the ports of Sagunto, Valencia and Gandía, as well as the main environmental management parameters and indicators associated with them, together with a detailed description of the results obtained.

Guide to the Birds of the Port of Valencia

With the publication of this Guide to the Birds of the Port of Valencia, the PAV aims to disseminate the great variety of birds that can be sighted in the port environment, providing experts with some initial knowledge from which to carry out their study and monitoring and, at the same time, providing any citizen with the possibility of identifying in a practical way the species that fly over our ports during the different seasons.

The idea for this guide arose as a result of the ECOPORT project and its publication fulfils two purposes: Firstly, to respond to the demand for information from society in general regarding knowledge of the biodiversity of our port. And secondly, to comply with the commitment to "provide adequate training and awareness-raising for staff to promote the development of this policy", as stated in the Environmental Policy.

Guide to fishery resources

The species that are marketed in the FISHERS' guilds of Sagunto, Valencia and Gandía are collected. The guide presents the species in their usual natural form.

Guide to the underwater fauna and flora of the Port of Valencia

According to the commitments adopted in its Environmental Policy, this Port Authority, in collaboration with the University of Valencia, has carried out a study of the underwater flora and fauna of the Port of Valencia. The special morphological characteristics of the port environment, the great diversity of commercial activities, as well as the maritime traffic in this inter-oceanic port make this study an effective tool for the knowledge of biodiversity in the port area. At the same time, the study not only provides initial information to subsequently determine the possible effects that port activity may have on the fauna and flora, but also highlights the richness and importance of the living beings that inhabit the port enclave.

As a result of this work, this guide has been published, which has the virtue that all the images shown in it have been taken in the Port of Valencia. The species listed here are the most representative of the study area and therefore constitute a small part of the extraordinary wider catalogue of species present.

Video of the Valencia Port Authority's Environmental Actions

A video has been produced, compiling the main environmental actions carried out to date by the Port Authority of Valencia in the ports it manages (Sagunto, Valencia and Gandía). Its purpose is making known what the main environmental actions have been and what the results obtained have been, thus contributing to enriching the environmental knowledge of the different actors involved in port activity, and especially of other port authorities with similar environmental problems.

10. GREEN ACCOUNTING

/ 10.1 Environmental spending

The PAV's costs and expenses for the financial year 2024, related to the improvement of the environment, are broken down as follows:

CONCEPTOS	EJERCICIO 2024	EJERCICIO 2023
GASTOS DE PERSONAL:	**424.591,22**	**350.188,27**
OTROS GASTOS DE EXPLOTACIÓN:	**5.356.076,38**	**4.783.033,92**
RECOGIDA DESECHOS GENERADOS POR BUQUES	4 .539.178,31	3.886.706,41
REPARACIONES Y CONSERVACIÓN	461.480,41	547.208,32
SERVICIOS DE PROFESIONALES INDEPENDIENTES	131.123 ,96	143.554,44
SUMINISTROS Y CONSUMOS	19.351.44	15.325,40
OTROS SERVICIOS Y OTROS GASTOS	204.942,26	190.239,35
AMORTIZACIONES DEL INMOVILIZADO: (*)	**364.727 ,97**	**360.992,14**
TOTAL GASTOS Y COSTES MEDIOAMBIENTALES	**6.145.395,57**	**5.494.144,33**

(*) Activos adscritos al servicio de medioambiente

/ 10.2 Tangible and intangible fixed assets

The composition of and movements in intangible assets and property, plant and equipment related to environmental improvement during the financial year 2024 are as follows:

ACTIVOS MEDIOAMBIENTALES (IMPORTES BRUTOS	31/12/2023	ADICIONES DEL EJERCICIO (+)	BAJAS (-)	31/12/2024
ACCESOS MARÍTIMOS	3.748.162,71			3.748.162,71
OBRAS DE ABRIGO Y DÁRSENAS	148.247,29			148.247,29
OBRAS DE ATRAQUE	91.772,15			91.772,15
INSTALACIONES GENERALES	285.057,81			285.057,81
PAVIMENTOS CALZADAS Y VÍAS DE CIRCULACIÓN	5.899,45			5.899,45
MATERIAL FLOTANTE	126.147,18			126.147,18
MATERIALDIVERSO	960.784,67	184.092,00		1.144.876,67
APLICACIONES INFORMÁTICAS	14.909,00			14.909,00
PROPIEDAD INDUSTRIAL	3.270,00			3.270,00
TERRENOS	63.534,43			63.534,43
TOTAL ACTIVOS MEDIOAMBIENTALES	**5.447.784,69**			**5.631.876,69**

AMORTIZACIONES DE ACTIVOS MEDIOAMBIENTALES	31/12/2023	ADICIONES DEL EJERCICIO (+)	BAJAS (-)	31/12/2024
ACCESOS MARÍTIMOS	1.681.739,67	78.185,28		1.759.924,95
OBRAS DE ABRIGO Y DÁRSENAS	77.232,52	2.969,28		80.201,80
OBRAS DE ATRAQUE	79.752,61	3.068,82		82.821,43
INSTALACIONES GENERALES	257.730,87	6.973,56		264.704,43
PAVIMENTOS CALZADAS Y VÍAS DE CIRCULACIÓN	5.899,45			5.899,45
MATERIAL FLOTANTE	126.147,18			126.147,18
MATERIAL DIVERSO	941.045,40	70.343,45		1.011.388,85
APLICACIONES INFORMÁTICAS	14.909,00			14.909,00
PROPIEDAD INDUSTRIAL	3.270,00			3.270,00
TOTAL AMORTIZACIONES DE ACTIVOS MEDIOAMBIENTALES	**3.187.726,70**	**161.540,39**		**3.349.267,09**

11. SUSTAINABILITY INDICATORS

As in previous Reports, the following is a recapitulation of the environmental indicators used to report on the activity of this Port Authority.

Since 2011 the PAV has been working with three groups of indicators; the **first group** comes from the GRI (Global Reporting Initiative) methodology adapted to the characteristics of port activities and which were defined as a result of the MESOSPORT project.

The **second group** consists of the indicators required by Regulation EC1221/2009 EMAS III. In addition, the PAV is working on a **third group** of sustainability indicators to be included in the PAV Sustainability Report, as a result of the State Ports Sustainability Working Group, and which aims to unify criteria for reporting the sustainable behaviour of the Spanish Port System, which are not included in this Statement.

In this Statement only the most relevant of the first group are listed, in addition to those of the second group, as required by Regulation EC1221/2009 EMAS III.

First group:

A 14	TOTAL NUMBER AND VOLUME OF THE MOST RELEVANT ACCIDENTAL SPILLS.

See Chapter 7. Emergency responses

A 15	INITIATIVES TO MITIGATE THE ENVIRONMENTAL IMPACTS OF PA ACTIVITY

Certifications: see Chapter 4. Description of the Environmental Management System, section 4.2. Certifications:

- UNE EN ISO 14001:2015 Standard on Environmental Management since 2006.
- UNE EN ISO 50001:2011 Standard on Energy Management since 2016.
- EMAS III certification since 2008.
- PERS (Port Environmental Review System) certificate, the latest renewal corresponding to 2015.

Water quality:

- Cleaning of floating debris from the water mirror: by means of the vessel Limpiamar III. See Chapter 6, section 6.4.5. Water quality monitoring results 2018.
- Fighting against oil spill pollution: through emergency plans. The PAV has equipment to mitigate the effects of contamination. See Chapter 7. Emergency responses
- Water quality control network. See Chapter 6. State of the Environment, section 6.4. Water quality.

Air quality: See Chapter 6. State of the Environment, section 6.2. Air quality control:

- Existence of Control Networks, Chapter 6. State of the Environment.
  - Acoustic quality control network, section 6.3.
  - Air quality control, section 6.2.

Waste management:

- A Waste Transfer Centre (WTC) is available to facilitate waste collection. See Chapter 6. State of the Environment, section 6.1. Waste, sub-sections 6.1.1. Own and 6.1.2. From the Port Premises.
- The PAV has the port service for the collection of Marpol I, IV and V under indirect management. See Chapter 6. State of the Environment, section 6.1. Waste, sub-section 6.1.3. Waste from Vessels.

Innovation and Cooperation Projects: See Chapter 8. Innovation and Cooperation Projects

A 17	COST OF SIGNIFICANT FINES AND NUMBER OF NON-MONETARY SANCTIONS FOR NON-COMPLIANCE WITH ENVIRONMENTAL REGULATIONS.

No fines or non-monetary sanctions have been imposed for non-compliance with environmental regulations.

Second group:

See Chapter 5. Natural Resources Management, section 5.5. Summary of indicators.

12. RECOMMENDATIONS FOR IMPROVEMENT

In closing this Statement, the Port Authority of Valencia wishes to reaffirm its commitment to the protection and improvement of the environment by promoting the adoption of good environmental practices among all interested parties, be they employees, companies, public administrations, neighbours or any agent linked to our management system.

The common goal is to ensure that present and future generations can continue to enjoy a clean, safe and sustainable port area.

In this regard, all actors involved are invited to follow the following good environmental practices:

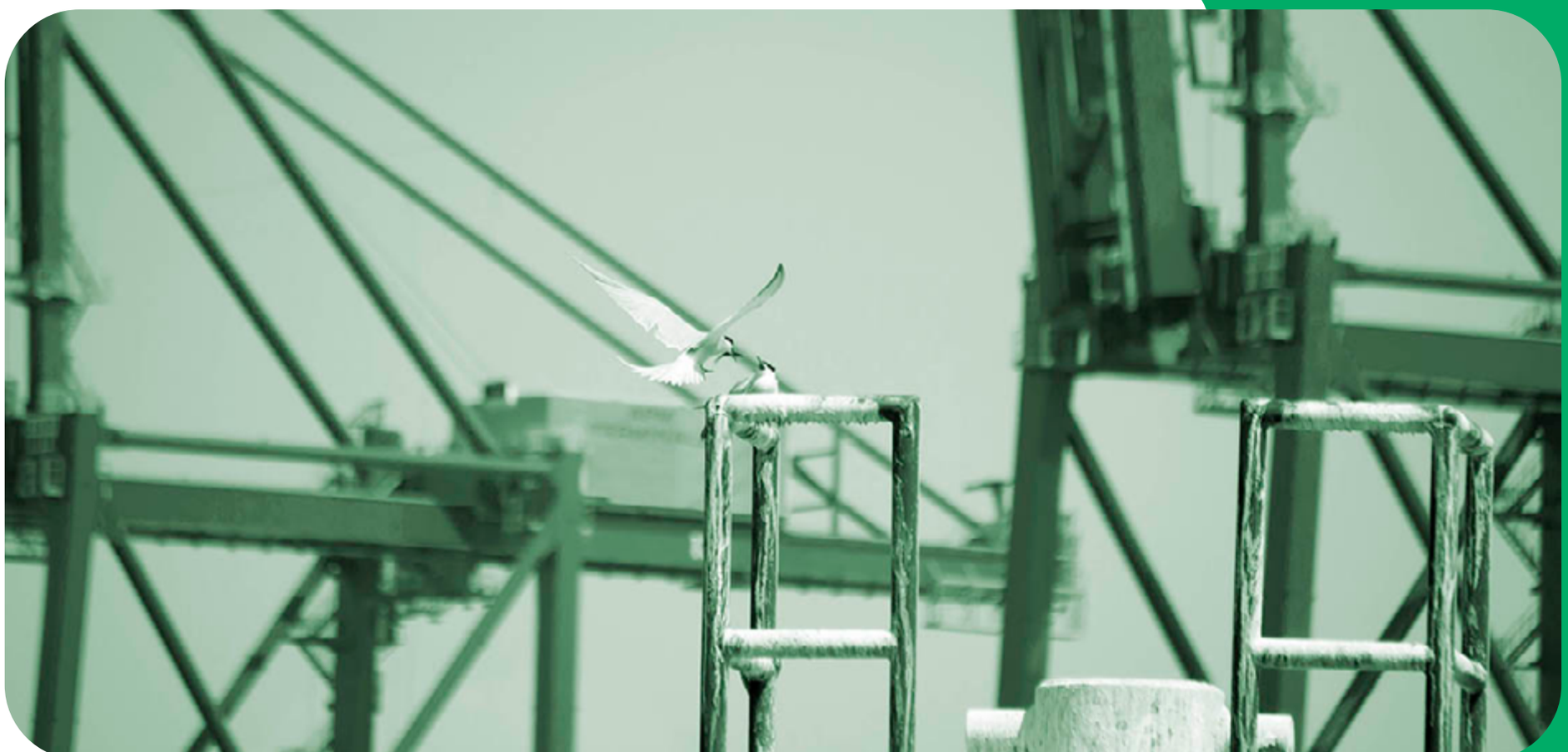
- **Reduce waste generation at source and wherever possible.**
- **Reuse those materials or products that were cosidered waste in another part of the process.**
- **Separate hazardous waste from each other and from other waste..**
- **Manage waste appropriately through authorised transporters and managers**
- **Do not discharge unauthorised substances into the sewage system.**
- **Check your vehicles by carrying out the necessary periodic inspections. Proper maintenance reduces fuel consumption and pollutant emissions.**
- **Protects the marine environment: The sea belongs to everyone; avoid dumping any substance, of solid or liquid nature, in port waters.**
- **Use water responsibly: it is a scarce resource. Use only as much water as necessary, apply drip irrigation in gardens, install low consumption cisterns and reuse water whenever possible.**

Please, do not forget that:

"WE ARE NOT ONLY HEIRS OF THE EARTH, OF THE RIVERS, OF THE MOUNTAINS, OF THE WIND; WE ARE ITS GUARDIANS AND TRUSTEES"

Kyoto Protocol

13. VERIFICATION AND VALIDATION



13. VERIFICATION AND VALIDATION

This Environmental Statement for 2024 registered with the Regional Government of Valencia under number E/CV/000023.

Verification body: Bureau Veritas Iberia, S.L.

Verifierr: ES-V-003