ENVIRONMENTAL REPORT 2019

Port Environmental Review System

Version mars 2020

DUNKERQUE PORT

ESPO

ECOPORTS

Cover photo: Seagoing ships, that perform better in reducing air emissions than required by the current emission standards of the International Maritime Organization, identified by The Environmental Ship Index (ESI) and used by Dunkerque-port

INTRODUCTION

This environmental report is intended to inform anyone interested in the environmental implications of the port of Dunkirk and provides information on the environmental management implemented which aims to avoid, reduce or compensate detrimental effects. Dunkerque-port was certified in 2018 on the basis of the so-called Port Environmental Review System (PERS) standard of the Ecoport network[1].

This environmental report also includes the second recertification[2]. It again documents the successful environmental management that has been practiced in the port of Dunkirk for several years. PERS is an environmental management system specially developed for the requirements of ports. It refers, for example, to voluntary instruments for preventive environmental protection for the systematic recording and prevention of the environmental implications of a port. Consequently, the report mainly meets the requirements of the certification process in terms of content; it should be updated every two years and be available in the public domain.

The progress of the environmental initiative was presented to the Development Board and the Board of Trustees of Dunkerque-port, respectively on September & November 2019, and on May, June & November 2019[3].

In addition, the progress of Dunkerque-port projects related to the environment is regularly presented during conferences, called « Sustainable Development Days » organised by the port. These events, real tools for reporting, allow the public to appraise and comment on the progress of the port's undertakings for the environment and the development of its district[4]. This clear policy of openness on the part of the port was recognised at the 2016 ESPO Awards, when Dunkirk-Port was one of the five finalists of this competition which rewards European ports working towards better community integration of their districts[5].

[1] This network has been part of the European Sea Ports Organisation (ESPO)
https://www.espo.be/

[2] The Dunkerque-port Environmental Report 2017 can be found at :
http://www.dunkerque-port.fr/en/iso9001/environmental-policy.html

[3] The progress of the environmental initiative and the Strategic masterplan 2013-2019 is available :
http://www.dunkerque-port.fr/index.php?cmpref=64081&lang=fr&module=media&action=Display

[4] A report on the latest Sustainable Development Days is available at :
http://www.dunkerque-port.fr/fr/capitainerie/developpement-durable-dunkerque-port.html

[5] The ESPO award booklet is available at :
https://www.espo.be/media/ESP-1926%20(ESPO%20Award%202016)_Brochure_FINAL.pdf

1. DUNKERQUE-PORT

1.1 Sphere of Dunkerque-port

The port of Dunkirk (Dunkerque-port) is a state-owned industrial and commercial establishment. It is located 40 kilometres from Dover in England, 10 kilometres from the Belgian border, near the city of Lille and in the centre of the Brussels-London-Paris triangle. It comprises an onshore area of 7,000 ha and a marine area of 38,000 ha. Extending along 17 km, the onshore port district consists of two ports: the older Eastern Port, and Western Port which dates from the expansion in the 1970s. Each port has an outer harbour that allows it to berth large ships with draughts of 14.2 m in the Eastern Port, and 22 m in the Western Port.[6]

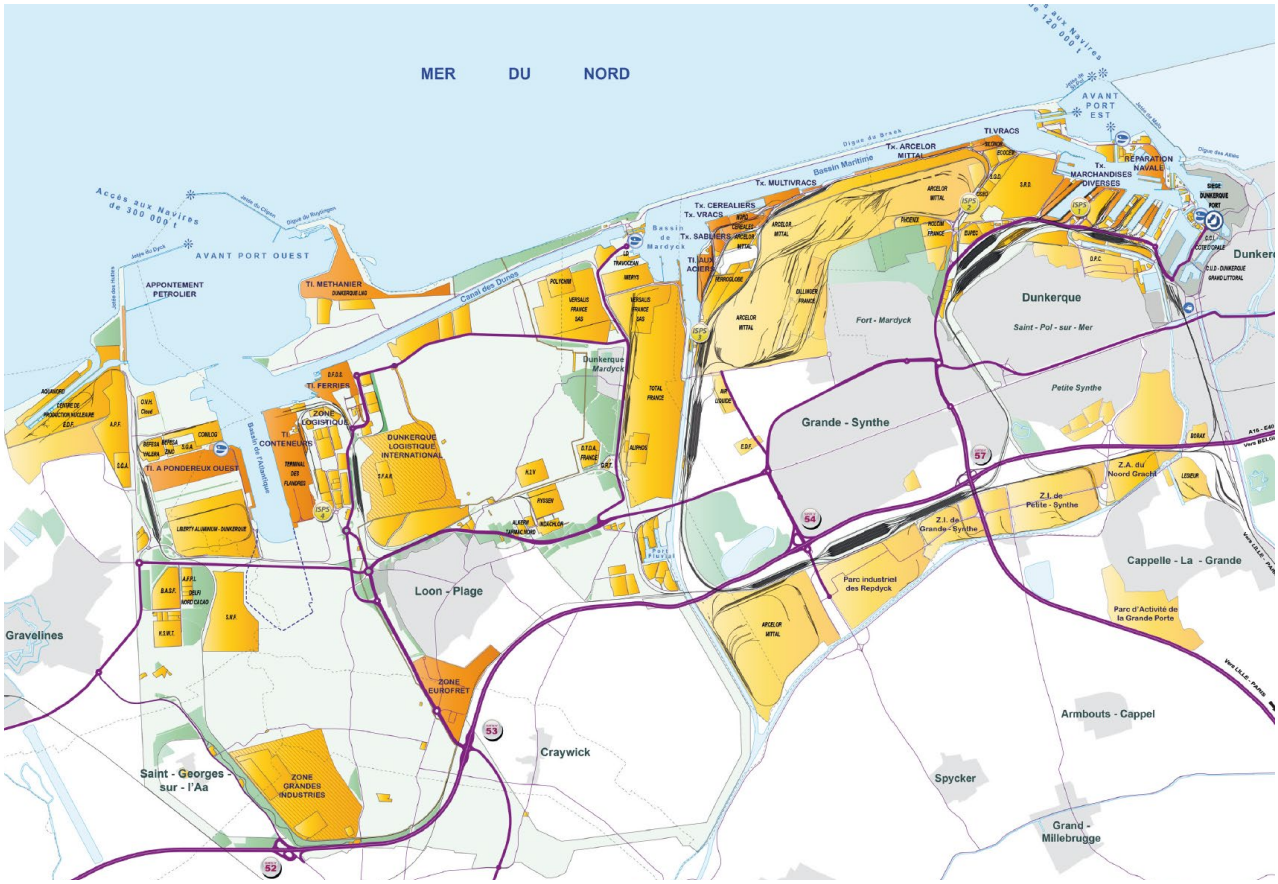


Figure 1 : Map of Dunkerque-port

The Eastern Port and the Central Port are formed of many docks and channels, some of which are only accessible via locks. It is also connected to the waterway network by the Bourbourg canal and the wide-gauge canal. Finally, it is the outlet of inland canals for the wateringues7 whose purpose is to discharge inland water during flooding. The notable feature of the Central Port is that it hosts most of the industrial businesses installed on Dunkirk-Port's land. These include major multinationals such as Arcelor Mittal, Versalis, TOTAL, etc, as well as many terminals designed for the transport of bulk cargoes including grain. This makes it the part of the port with the highest number of high-risk sites, with several of the industries in this sector being subject to the SEVESO Directive. Eastern Port docks are specialised in handling

[6] Map of Dunkerque-port plan is available online on the Dunkirk-Port website http://www.dunkerque-port.fr/fr/presentation/documentation-port-dunkerque/plans-port-dunkerque.html

[7] Wateringue or watergang: Drainage structure or ditch created to drain fens, wetlands or floodplains below high water level.

general cargoes loaded on board conventional ships: copper, pipes, wood and manufactured products. All the dry-docking activities are carried out here, for both merchant ships and pleasure craft. Today there is not enough available land in this sector to allow the planning of any major economic development.

Figure 2 : The Estern port

In both configuration and purpose, the Western Port is simpler than the Eastern Port, having two main docks and a channel connecting to the Eastern Port via a system of locks. It has no direct access to the waterway network. The Western Port offers direct access to the sea and allows fast calls for the world's largest container carriers, ore carriers and all RoRo vessels. This makes Dunkirk-Port the second-largest French port for trade with Great Britain. And finally, since 2016 the LNG terminal has accommodated ships carrying Liquefied Natural Gas (LNG). The particular feature of the Western Port is its land reserves of 3,000 ha which offer real opportunities for development and thus for economic growth. In addition, as this part of Dunkirk-Port is less industrialised, it presents fewer constraints in terms of technological risks.

1.2 The Port's missions and activities

As happened in most European ports, following the Ports Reform of 2008, France's major sea ports took on the duties of "Landlord Ports" by refocusing their missions on activities of strategic coordination involving a great variety of players, both local and from outside the port's territory.

Thus, with the adoption of the law of 4 July 2008, the role of Dunkirk-Port, as a State-owned establishment, has changed from that of an operator to that of a planner and developer, with sustainable development of the port district as its goal. Each of the French major sea ports carries out the missions defined in Article L. 5312-2 of the Transport Code, and in particular the following:

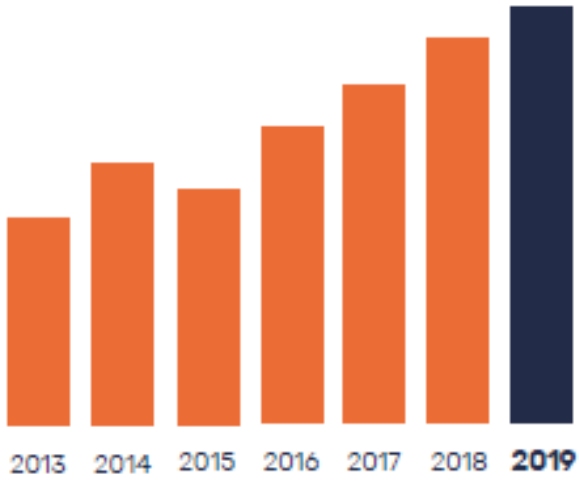
- development, operation and maintenance of shipping access channels and port infrastructures;
- development and management of its district (industrial and logistics areas);
- management and preservation of the natural areas which it owns;
- promotion of the rail and waterway links available;
- development and management of the industrial or logistics areas related to the port's activity;
- actions contributing to the general promotion of the port.

The port's governance was also modified by the formation of the Development Board and the Board of Trustees.

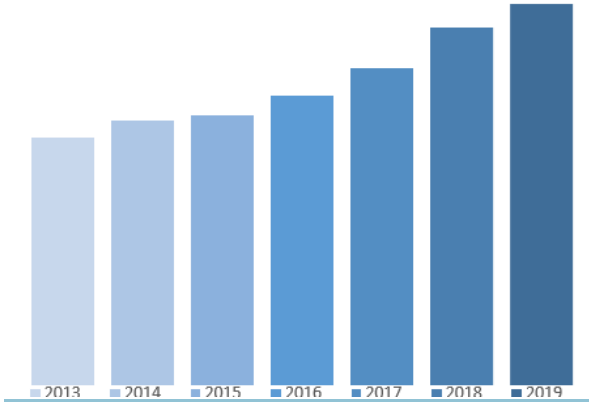
The Dunkerque-port’s Strategic Masterplan is an investment program, commercial actions plan and land property management. The previous Strategic Masterplan 2013-2018 has just ended, its review has been published. The Strategic Masterplan 2019-2023 is in process.

1.3 Selected Key Performance Indicators of Dunkerque-port

Annually, key KPIs for the port of Dunkirk are constantly updated and published at press conference[8]. The 2019 activity report includes port statistics from 2014 to 2018. It is available online[9].

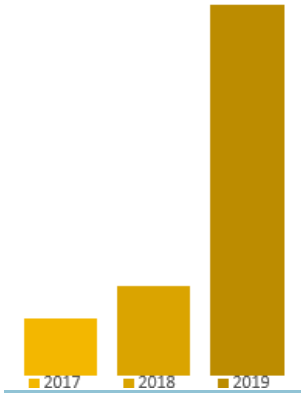


Total traffic total : 53 MT (+ 3% 2018 et +22% 2013)

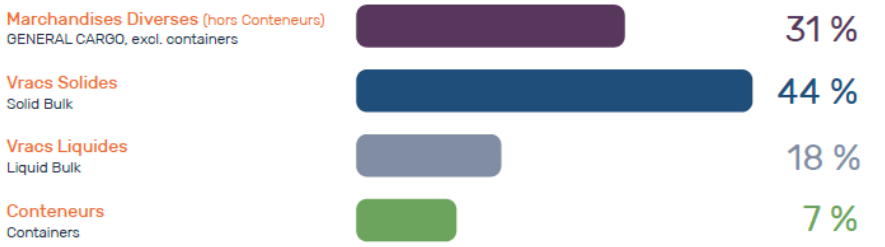


Containers : 450 000 TEU

(+ 7% 2018 et +54% 2013)



LNG : 5,1 MT en 2019



Traffic breakdown 2019

1.4 Environmental issues

All the port's missions and the activities generated by the Dunkirk port sector induce a number of constraints, besides the economic considerations in terms of added value and employment. Although affected by human activity, the port district is still the scene of many environmental issues, including ecological issues. Alongside industry and commercial maritime traffic, the port of Dunkirk has several

[8] All press conferences and activities reports are available online on the Dunkerque-port website :
http://www.dunkerque-port.fr/fr/presse/dossiers-presse-port-dunkerque.html
http://www.dunkerque-port.fr/fr/presentation/documentation-port-dunkerque/rapports-activite.html

[9] Activity report 2018 is available online on the Dunkerque-port website :
http://www.dunkerque-port.fr/index.php?cmpref=61757&lang=fr&module=media&action=Display

outstanding natural areas in its territory and a remarkable degree of biodiversity, with many protected species on its shoreline.

Besides biodiversity and ecological continuity, the quality of surface water is also a major issue, particularly as regards the targets for good chemical and ecological status laid down in the Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD). This issue concerns both the watergangs, ditches and canals which run through the port's onshore district, and the transitional water (harbour water) and coastal water. The quality of the sediment, which is related to the quality of the surface water, is a significant issue for a port such as Dunkirk in light of the volumes of sediment dredged (maintenance and works dredging) and managed every year, whether at sea or on land.

Figure 3 : the Western port

Similarly, natural and technological risks are important issues in view of the different parts of the port's territory that are covered by the Natural Risk Prevention Plan and the Technological Risk Prevention Plan. Seawater flooding and inland flooding are among the greatest natural risks. As concerns technological risks, all the risks inherent in the presence of SEVESO-controlled industries must be considered.

Finally, quality of life, especially air quality and noise, odour and aesthetic nuisance, is also an issue that must be addressed in the port district, given the immediate proximity of the towns of Gravelines, Mardyck, Saint Pol sur Mer, Grande-Synthe and Dunkirk.

1.5 Port Environmental Review System

Port Environmental Review System (PERS) is a European initiative for environmental certification of seaports within the EcoPorts network promoted by the Organization of European Seaports (ESPO). The PERS methodology is one of the ESPO tool to demonstrate that Dunkerque-port meets various requirements in terms of sustainable development and environmental preservation.

In 2018, Dunkerque-port obtained PERS certification from ESPO. The PERS certificate is valid for a period of two years. At the end o f this period, the sustainability and environmental preservation of the port of Dunkirk are reviewed. This report is developed as part of the recertification process. It therefore present the way in which the port compiles the requirements of the PERS.

These are as follows :

- Environmental policy (Chap 2.)
- Significant environmental aspects and legal requirements (Chap 3.)
- Responsibilities and resources (Chap 4)
- Analysis of compliance (Chap 5)
- Environmental report (Chap 3)
- Good practices (Chap 6)

With this reporting procedure, the aim is, also in the future, to illustrate the constant willingness of Dunkerque-port to work towards on-going improvements in the quality of the environment in and around the port and to proceed with corresponding organizational improvements in their own sphere and in interaction with all stakeholders involved in the ports.

Figure 4 : PERS certification

2. SUSTAINABILITY IN OUR POLICIES

2.1. Environmental policy

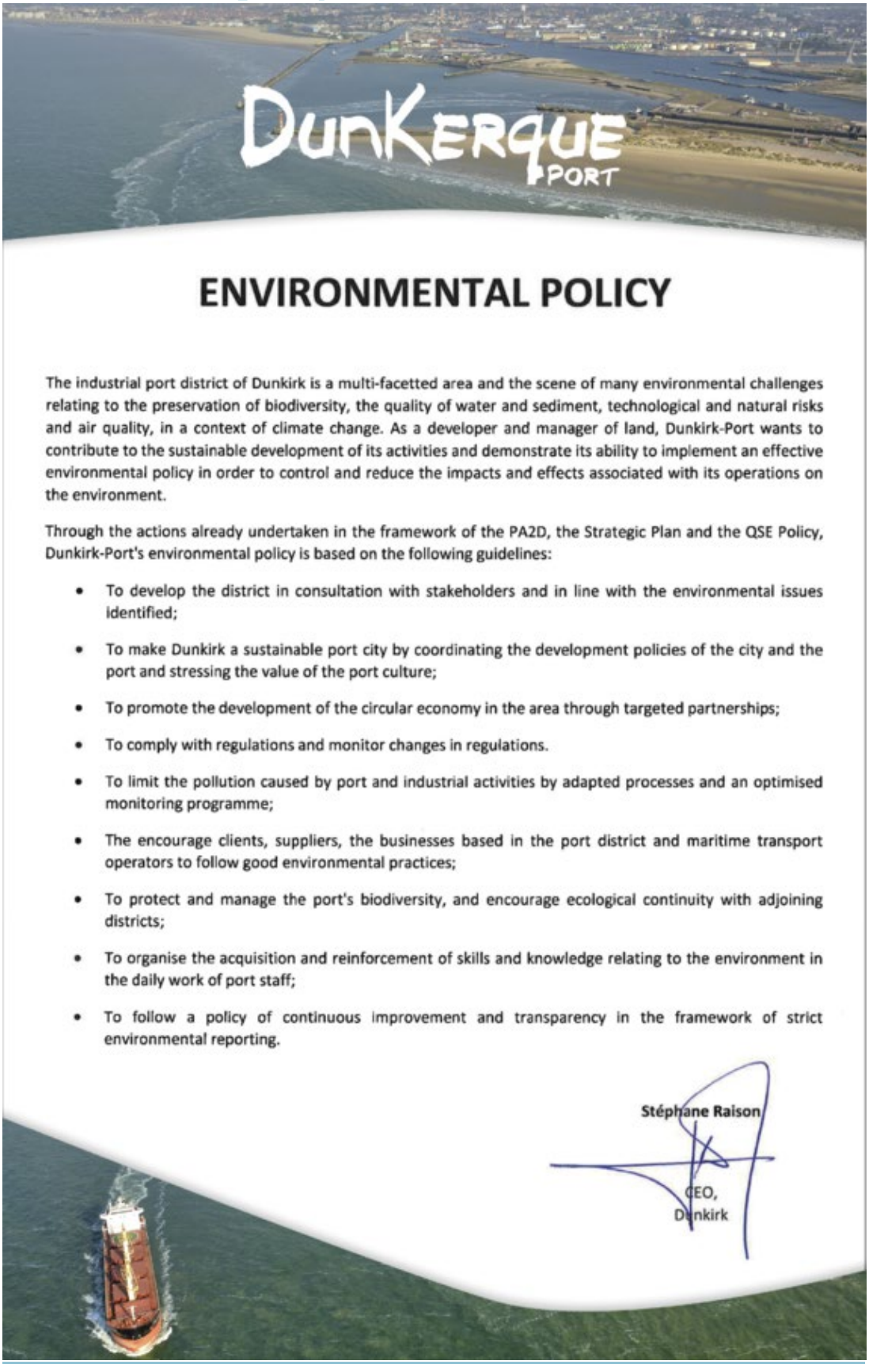


Figure 5 : Environmental policy

The port of Dunkirk has identified its actions which can help improve the environmental perfor-mance and the sustainability of its operations.

The environmental policy statement was shared with employees and all harbour activities. It is a declaration of public authority intentions and principles for the port's overall environmental perfor-mance. It provides a framework for the establishment of its environmental objectives and targets.

This environmental policy is also based on three other management initiatives : the Strategic Masterplan 2019-2023, the Sustainable Masterplan (PA2D) 2019-2023 and the Quality and safety policy (QSE), which contribute to the port's commitment to reduce the impacts of its activities on the environment, as well as to reduce its carbon footprint.

This environmental policy aims to be coherent and integrative of all environmental mana-gement procedures and actions existing at the Dunkerque-port

2.2. Strategic masterplan

Port of Dunkirk is an integrated hub where goods, residual streams, data, people and ideas come together, where is room to experiment and where the strengths of businesses, the city and the region are all fully integrated. The port is an economic driver for Dunkirk metropolitan region and for the Haut-de-France regional autority as well.

The Strategic masterplan sets out the road map for the next years from 2019 to 2020, by bolstering clusters and networks, becoming the port of choice, diversifying and innovating, being a smart and clean port. The ambitions of the port of Dunkirk are fourfold. This development actions plan has been built with the relevant stakeholders during 2019. Today, there are in progress.

The results of the previous Strategic masterplan 2014-2018 is available[10].

Port of excellence

To give high-quality infrastructures and services to customers to fulfil their needs today and tomorrow

Sustainable Port

To transform and develop the port territory so as to do it enter into the dynamics of energy and ecological transitions

Citizen Port

Give the citizen a feeling of belonging to the port world and the desire to be part of it

Connected Port

To bring the port into the digital era to streamline traffic, data, administrative procedures, goods, etc.

Figure 6 : The Strategic masterplan

[10] The progress of the environmental initiative and the Strategic masterplan 2013-2019 is available : http://www.dunkerque-port.fr/index.php?cmpref=64081&lang=fr&module=media&action=Display

2.3. Sustainable masterplan (PA2D)

Aware of the challenges associated with its activities, Dunkerque-port has also undertaken the drafting of a Sustainable masterplan (PA2D) through a strategy of participatory governance, alongside many partners in the port area. The new one PA2D provides the framework for scheduled implementation of the 2019-2023 Strategic masterplan in the field of sustainable development. It consolidates all the actions undertaken and now reflects the policy, objectives and implementation of sustainable development in the port's growth and activities. In particular it is intended to ensure consistency between the various regional or local planning documents. The corrective actions identified by PERS methodology reducing significant environmental impacts have been included in the PA2D actions plan, in order to show the complementarity and coherence of the two documents.

A partner of Dunkirk city development

To work for a clean, future-proof and sustainable port by investing in promising initiatives and to improve quality living environnement, together with the territory

A partner in environmental performance of industries

to promote a sustainable and responsible chain with its customers to limit the direct and indirect impacts of port activities

A responsible organisation

to start with port organisation, reduce our CO2 footprint and invest in being a good employer

Figure 7 : PA2D

Associated with relevant assessment indicators, the action programme will evolve to ensure sustainable development of the port area. Each action of the programme brings together the partners concerned by the subject in an working group. In addition, the overall progress of the PA2D action programme is monitored by a technical committee made up of members of Dunkerque-port's Development Board, so making it possible to pursue the dynamic of partnership and governance initiated by the drafting of the PA2D.

2.4. Quality and safety policy (QSE)

Alongside the PA2D and fully in line with it, Dunkerque-port has for many years been engaged in a process of continuous improvement of Quality Safety and Environment program (QSE), which resulted in the award of ISO 9001 certification in 2009 for the handling of maritime and waterway traffic. The management's policy for handling maritime and waterway traffic is broken down into goals for each process, interacting with each other, to ensure that we can meet our client's expectations in compliance with regulations.

In accordance with ISO recommendations, the pilot of each process has listed the risks associated with their activity. During annual reviews they report on the risks and the means put in place to control them, as well as an analysis of the indicators used. The QSE action programme is thus reviewed annually.

Alongside this approach, the port of Dunkirk is continuing with its commitment to provide information and communications, particularly on social and environmental actions.

DUNKERQUE PORT

Quality Safety Environment

Policy

In pursuing our policy of continuous improvement and our commitment to comply with regulatory requirements, GPMD reaffirms its intention to satisfy our clients and strengthen our partnerships based on the following guidelines:

Pilot our establishment.

Reduce our environmental footprint by preventing pollution and promoting the circular economy.

Organise a work environment that ensures the well-being, health and safety of our staff.

Guarantee the quality of our services.

Rally our staff around our values and strategic plan.

Exhibit exemplary behaviour and relationships.

Satisfy our clients and partners.

Dunkerque Port certified ISO 9001:2008 for the Quality of its handling of maritime and waterway traffic

In order achieve these goals, I and the whole leadership team undertake to drive forward and promote our management system. I delegate to the Legal, Organisation and Human Resources Division the task of defining, implementing and coordinating this system. I count on the total involvement and participation of those supervising and managing our different activities, with the support of all our employees, to ensure that these ambitions are met.

Stéphane Raison
CEO
Dunkerque

Figure 8 : Quality & safety policy

3. REGISTER OF ENVIRONMENTAL ASPECTS, LEGAL REQUIREMENTS AND PERFORMANCE INDICATORS

3.1. Significatives environmental aspects

The port district is home to many activities which, in view of their interactions with the natural environment, are governed by French and European regulations. Efficient management of environmental performance requires a thorough knowledge of the environmental aspects which concern the port's activities, products and services. In this respect, the identification of regulatory requirements is of paramount importance in the port's environmental management system.

As part of its continuous improvement process, Dunkerque-port has made an environmental analysis of its activities across its district. An internal procedure integrated in the port's management system (PAD.PRO.1602) resulted in a list of 260 environmental aspects related to the activities identified. They concern dredging, the storage of hazardous materials, energy consumption, water consumption, etc. The places, activities and environmental impacts of each environmental aspect are defined.
A raw score is applied according to their frequency of occurrence, their seriousness and their legal requirement. This raw score is weighted by integrating an index for control of the environmental aspect. This is quantified on the basis of the human, technological and organisational resources used to reduce the risks. This rating grid is different from the one used in the previous environmental report (PERS, 2018[11]). It allows a better characterization and prioritization of the impacts in order to highlight the significant environmental aspects. The result of this analysis provides an indication of the residual criticality, categorised according to its significance. If this criticality exceeds a score of 160 points, the environmental aspect is considered as significant.

$$\text{Calcul de la cotation :} \quad \frac{Q \times F \times G \times CR}{M}$$

Q : quantité
F : fréquence d'apparition de l'aspect
G : gravité de l'impact
CR : conformité réglementaire
M : moyen de maitrise

Figure 9 : Scoring method

This means that an activity having a strong environmental impact according to the *frequency* and *seriousness* criteria may be allocated a low or average level of significance in terms of criticality in view of the means implemented to limit the risks.

Thus, dredging operations do not appear as significant in the environmental analysis because the process for managing the potential environmental impacts and effects is well controlled under the Dredging Master Plan[12] (SDD) which the port of Dunkirk has followed since 2010. It is one of the strong components of the environmental and sustainable development policy developed by Dunkerque-port to ensure the successful coexistence of industry, town planning and the marine environment. It sets the environmental

[11] Dunkerque-port Environmental report 2018 is available online on the Dunkerque-port website : http://www.dunkerque-port.fr/index.php?cmpref=49656&lang=fr&module=media&action=Display

[12] The Dredging Master Plan booklet is available online on the Dunkerque-port website : http://www.Dunkirk-port.fr/fr/capitainerie/developpement-durable-Dunkirk-port.html

objectives, and defines and schedules the action plan to be followed for monitoring and control of the quality of sediment and water. In particular it recommends the implementation of solutions for onshore management and recycling of "undumpable" sediment.

The environmental analysis register is in the form of an Excel file that can be consulted on the premises of Dunkerque-port. This is reviewed at least once a year, depending on changes in context, activities and actions carried out. Adapted and dedicated software is being deployed in 2020, it integrates both quality, safety and environmental assessment and rating tools to generate action plans and affected operational control.
By means of this methodology, 6 Significant Environmental Aspects have been identified and are shown in the table below. They are divided between the seven main activities specific to Dunkerque-port or present on its territory:

- Operations (rail networks, structures, footbridges, cranes, dry and wet docks)
- Maintenance (maintenance of equipment, quays, dikes, sewerage, buildings, car fleet, workshops, roads and utilities)
- Activities related to maritime and waterway traffic
- Developments (Works)
- Commercial, industrial and logistics activities
- Leisure activities (public, pleasure boating, hunting, etc)
- All activities

The table also presents the Significant Environmental Aspects identified during the previous PERS (PERS, 2018) as well as the corrective actions that were implemented between 2017 and 2019.The actions defined in relation to the 2019's significant environmental aspects are integrated in the PA2D management programme.

Significant environmental aspect	Environ-mental impact	Responsible organisation	Regulatory and other legal requirements	Dunkerque-port reference documents for contrôle measures	Score 2017	Measures (PA2D) 2017-2019	Score 2019
Operations (railway lines, structures, footbridges, cranes, dry and wet docks)							
Dispersion of pollutants (seepage of oil, grease, etc)	Use of resources Water, Soil Marine and land biodiversity Landscape and quality of life Waste	EOO		Operating procedure PAD.MO.8408	**27**	Verification during field visits Installation of retention and absorbent basins to contain potential pollution..	**16** (grease) **37** (seepage of oil)
Management of hazardous and non-hazardous waste: production and sorting	Water, Soil Marine and land biodiversity Landscape and quality of life Waste	EOO/ACSI /ANI	Code de l'environnement	Guideline PAD.REF.1 602	**108**	Sorting waste at source and recovery process	**38**
Maintenance (maintenance of equipment, quays, dikes, sewerage, buildings, car fleet, workshops, roads and utilities)							
Dispersion of pollutants (seepage of oil, grease, etc)	Use of resources Water, Soil Marine and land biodiversity Landscape and quality of life Waste	EOO/ANI		Operating procedure PAD.MO.8408	**27**	Verification during field visits Installation of retention and absorbent basins to contain potential pollution.	**16** (grease) **37** (seepage of oil)
Discharge of rainwater from the port district into the natural environment	Water, Soil, Sediment Marine and land biodiversity Landscape and quality of life Health/infectious products Waste	ANI	Arrêts préfectoraux GPMD	Sewerage Master Plan	**81**	100% of the rainwater system is compliant in eastern port	**196**

Discharge of cleaning water from structures (locks)	Water, Soil Marine biodiversity Landscape and quality of life Health/infectious products Waste	ANI/EOO	Marine strategy framework Directive Water framework directive	Sewerage Master Plan	**126**	Integration of the significant environmental aspect into another aspect	
Management of hazardous and non-hazardous waste: production and sorting	Water, Soil Marine and land biodiversity Landscape and quality of life Waste	EOO/ANI	Arrêts préfectoraux GPMD	Operating procedure PAD.MO.8408	**108**	Waste separation and recycling	**38**
Management of floating macrowaste in port docks	Water, Sediment Marine biodiversity Landscape and quality of life Health/infectious products Waste	EOO/ANI	Marine strategy framework Directive Water framework directive	Port pollution control plan	**180**	Low quantity of waste recovered (< 10 kg) and management control	**16**
Non-compliance with instructions for storage of chemicals that may harm the environment	Water, Soil, Sediment Marine and land biodiversity Landscape and quality of life Health/infectious products	ANI		Operating procedure PAD.MO.1217	**45**	Verification during field visits Installation of retention and absorbent basins to contain potential pollution.	**112**

Activities related to maritime and waterway traffic							
Environmental incident: spillage of any product into the natural environment	Air, Water, Soil, Sediment Marine and land biodiversity Landscape and quality of life Health/infectious products Waste	CP/ANI	Code de l'environnement	Operating procedure PAD.MO.8408	**63**	Emergency exercise carried out in the port area to check the correct application of instructions.	**49**
Operations of fumigation, disinfestation and disinsectisation of ships' grain cargoes	Air, Water, Soil, Sediment Noise/vibration Marine and land biodiversity Health/infectious products Waste	CP /ANI	Code de l'environnement	Port pollution control plan	**81**		**112**
Consumption of fuels during navigation, manœuvres and calls	Energy	CP			**56**	Study for the implementation of coldironing	**280**
Atmospheric releases (PM, SOx, NOx, etc) and greenhouse gas emissions during navigation and manœuvres	Air Landscape and quality of life Health/infectious products				**84**	Integration of the significant environmental aspect into another aspect	
Atmospheric releases (PM, SOx, NOx, etc) and greenhouse gas emissions during calls	Air Landscape and quality of life Health/infectious products				**60**	Study for the implementation of coldironing	**70**

Management of hazardous solid waste, including used distress rockets	Water, Soil, Sediment Marine biodiversity Landscape and quality of life Waste	CP/ANI	Code de l'environnement	Guideline PAD.REF.1602 Guideline PAD.REF.1603 Operating procedure PAD.MO.1601 Ship waste masterplan	**252**	Management of solid waste from ships at MARPOL points, less poor sorting in 2018 and 2019. The distress rockets are collected by the supplier.	**112**
Management of non-hazardous solid and liquid waste	Water, Soil, Sediment Marine biodiversity Landscape and quality of life Waste	CP/ANI	Code de l'environnement	Guideline PAD.REF.1602 Guideline PAD.REF.1603 Operating procedure PAD.MO.1601 Ship waste masterplan	**112**	Management of solid waste from ships at MARPOL points, less poor sorting in 2018 and 2019. Liquid waste is pumped out at the request of the ship.	**64**
Management of cargo residues (solid/liquid)	Water, Soil, Sediment Marine biodiversity Landscape and quality of life Waste	CP/ANI		Guideline PAD.REF.1602 Guideline PAD.REF.1603 Operating procedure PAD.MO.1601 Ship waste masterplan	**108**	Management of solid waste from ships at MARPOL points, less poor sorting in 2018 and 2019. Liquid waste is pumped out at the request of the ship.	**112**
Accidental spillage of hydrocarbons during bunkering operations	Air, Water, Sols, Sediment Marine and land biodiversity Landscape and quality of life Waste	CP/ANI		Operating procedure PAD.MO.8408 Port pollution control plan	**108**	Emergency exercise carried out in the port area to check the correct application of instructions.	**28**
Handling of powdery products – Dispersion of airborne products and dust	Air, Water, Soil, Sediment Marine biodiversity Landscape and quality of life Waste	CP			**54**	-	**49**

Transit of hazardous substances (maritime, waterway)	Air, Water, Soil, Sediment Marine and land biodiversity Landscape and quality of life Waste	CP		Software Hazardous Merchandise in progress	**240**	Active software TIMAD	**280**
Deliberate environmental damage: littering, fly-tipping; failure to observe MARPOL points	Air, Water, Soil Marine and land biodiversity Landscape and quality of life Health/infectious products	CP/ANI	Code de l'environnement	Guideline PAD.REF.1605	**252**	Monitoring Less non-compliance noted in 2018 & 2019	**123**
Ship repair (sandblasting, painting)	Air, Water, Sediment Marine biodiversity Landscape and quality of life Waste	CP/EOO	Marine strategy framework Directive Water framework directive	Sewerage Master Plan Industrial contract of discharges water	**27**	-	**18**
Spatial developments (Works)							
Management of hazardous and non-hazardous waste	Water, Soil Marine and land biodiversity Landscape and quality of life Waste	AMO/CR/ ANI/ME	Arrêtés préfectoraux GPMD Code de l'environnement	Référentiel PAD.REF.1602 Référentiel PAD.REF.1603 Operating procedure PAD.MO.1601	**108**	Waste separation and recycling	**38**
Non-compliance with instructions for storage of chemicals that may harm the environment	Water, Soil, Sediment Marine and land biodiversity Landscape and quality of life Health/infectious products	AMO/CR/ ANI/ME			**45**	Verification during field visits Installation of retention and absorbent basins to contain potential pollution.	**112**

Atmospheric emissions and airborne dust	Air, Water, Soil, Sediment Marine and land biodiversity Landscape and quality of life	AMO/CR/ ANI/ME	Arrêtés préfectoraux GPMD Code de l'environnement		**135**	Verification during field visits and environmental management during construction area	**112**
Commercial, industrial and logistics activities							
Environmental incident: spillage of any product into the natural environment	Air, Water, Soil, Sediment Marine and land biodiversity Landscape and quality of life Health/infectious products Waste	CP/ANI	Règlement de police du port Réglementation ICPE	Operating procedure PAD.MO.8408 Port pollution control plan	**63**	Emergency exercise carried out in the port area to check the correct application of instructions.	**49**
Release of effluents into the natural environment by industrial and commercial sites in operation	Water, Soil, Sediment, Air, Marine and land biodiversity Landscape and quality of life Health/infectious products	CP/ANI/M E	Réglementation ICPE	Sewerage Master Plan Industrial contract of discharges water Consigne de sécurité PAD.CNS.1201	**80**	100% of the rainwater system is compliant in eastern port	**91,5**
Contamination of soil on industrial and commercial sites in operation	Water, Soil Landscape and quality of life Health/infectious products	DLI/ME	Contrats d'occupation temporaire Règlement de police du port Réglementation ICPE		**108**	Operating old industrials site procedure drafted (cf. Good pratice)	**112**
Airborne dust from bulk storage of industrial and commercial sites in operation	Air, Water, Soil, Sediment Marine and land biodiversity Landscape and quality of life		Code de l'environnement Réglementation ICPE		**135**	Verification during field visits and environmental management	**112**

Deliberate environmental damage: littering, fly-tipping	Air, Water, Soil Marine and land biodiversity Landscape and quality of life Health/infectious products	CP/VFP			**252**	Installation of dissuasive advertising signs in the port area	**196**
Noise nuisances due to operation of site	Noise, Vibration, Marine and land biodiversity Landscape and quality of life	CP/ANI			**60**	Noise monitoring	**40**
Leisure activities (public, pleasure boating, hunting, etc)							
Environmental incident: spillage of any product into the natural environment	Air, Water, Soil, Sediment Marine and land biodiversity Landscape and quality of life Health/infectious products Waste	CP/ANI		Operating procedure PAD.MO.8408 Port pollution control plan	**63**	Emergency exercise carried out in the port area to check the correct application of instructions.	**49**
Repair and maintenance of pleasure boats	Water, Sediment Marine biodiversity Landscape and quality of life Waste	CP/ANI/ EOO		Operating procedure PAD.MO.8408 Port pollution control plan Sewerage Master Plan Industrial contract of discharges water	**180**		**7**

All activities							
Road, rail, maritime and waterway traffic, including pilotage, boatage and towage	Energy Air, Water Soil Noise/vibration Marine and land biodiversity Landscape and quality of life	DP/VFP/CP		Guideline PAD.PRO.8201-8208	**80**		**40**
Cargo leaks (fuels, fluids, etc) from the various transport modes	Use of resources Air, Water Soil, Sediment Marine and land biodiversity Landscape and quality of life Waste	CP/ANI		Operating procedure PAD.MO.8408 Port pollution control plan	**180**		**112**
Production of non-hazardous liquid waste (by own Dunkerque-port's vessel))	Eau, Sol Biodiversité marine Paysage et cadre de vie Sanitaire/infectieux Déchets	ANI					**280**
Resources consumption	Conso Ressources	DP		Industrial network (« toile industrielle ») Masterplan		Environmental requirements guidelines for industries drafted (cf. Good pratice)	**280**

Tableau 1 : Significant environmental aspect - The two last aspects did not exist in the last review (PERS 2018).

3.2. Environmental performance indicators (EPi)

Knowledge of the environmental issues is an indispensable prerequisite of reporting. This tracking, which takes the form of indicators, allows a better grasp of the evolution of the port's environmental performance and an assessment of the effectiveness of the actions carried out. This work of assembling data is carried out by Dunkirk-Port and formatted in the form of a PA2D digital dashboard tool. This contains nearly 150 indicators serving to measure the environmental effects of the port's operations, the port's efforts to control or reduce these effects, and the quality of life. For each of these indicators, a contact person is appointed to facilitate feedback.

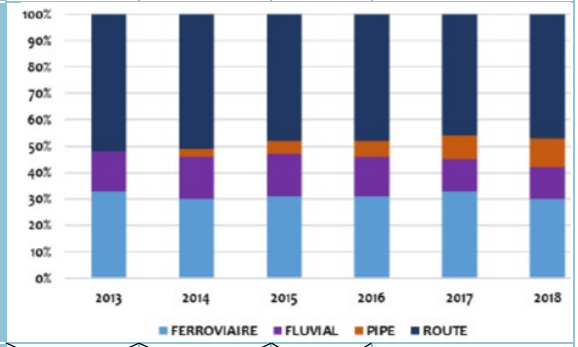
This PA2D dashboard, which is updated annually, can be consulted on the premises of Dunkerque-port. An excerpt is given below according to the requirements and PERS guidelines[13].

The thirteen indicators, which were chosen (PERS, 2018), were amended by more significant indicators for this recertification. For all of the 28 indicators which are listed below, the necessary basic data and statistics are available ; at the same time, the evaluation of these indicators supports to verify environmental improvements.

3.2.1. Emissions to air

The port is reducing CO_2 emissions and making operations sustainable. It extend these efforts to the organisation as a whole from premises to vehicule fleet. The port building's renovation resulted in a significant reduction. The modernisation of dock lighting also represented a major contribution. But energy consumption remains closely linked to the opening of locks and therefore to maritime traffic.

The industry in the port region, shipping and freight traffic jointly produce a substantial amount of CO_2 emissions. Dunkerque-port encourage a shift in freight transport less by road, more by water and rail.

Code		2011	2014	2017	2019
G.1.4	Total annual Carbon Footprint by SCOPE 1 et 2 (teqCO2)	1287	1194	1328	in progress
-	Percentage of traffic share				
-	Number of ESI ship				85

The history and geographic location of port and city have made Dunkirk as an essential link in the European energy network, due to the number and size of the facilities on its territory for the generation, import, consumption and transformation of energy. Industry, maritime traffic, road traffic, and the high density of the urban population induce high levels of atmospheric pollutants.

[13] PERS – Requirements and guidelines Version 5 (2016)

In 2019, Dunkerque-port has joigned the Environmental Ship Index (ESI) rebate, an international environmental rebate arrangement of port dues for sea-going vessels.

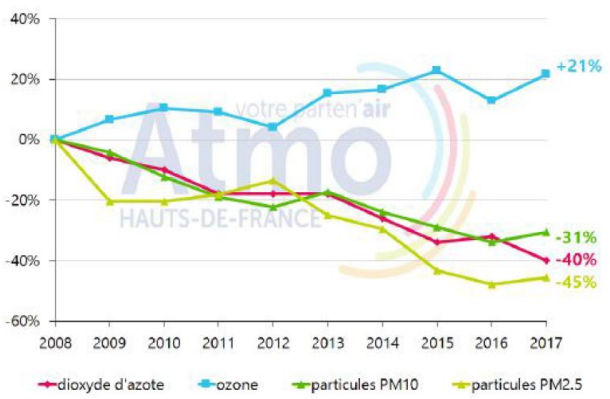
Due to its activity of handling and storage of ore and coal, bulk terminals generate airborne dust and causes nuisance for the environment and local residents. On the one hand, for more than ten years, many systems have been put in place at the bulk terminal to reduce its dust emissions.

Figure 10 : spraying stock

On the other hand, Dunkerque-port and the terminal operator, in collaboration with the State and other industrial firms of the Western Port, use a dust monitoring system, composed of sensors, which allows it to take direct action if dust norms are exceeded, and also address complaints from nearby residents. Bulk terminals operator have put in place many measures to reduce the quantities of airborne dust : the discharge and loading gantries are equipped with dust-suppression systems; the wagon loading towers are hooded; a system for water spraying stock and some of the traffic areas is in place...

G.3.2	Emissions of particulate matter PM10
G.3.3	Emissions of particulate matter PM2,5

Across the entire port territory, ATMO Hauts de France ((Air Quality Monitoring Association) has set up a monitoring network for many years on regulated substances. The conclusions are encouraging, the trend has now been down for several years.



Code		2016	2017	2018	2019
-	Percentage of good and very good air quality indices)	78%	79%	75%	in progress
-	Number of days of nuisance due to dustfall in the Western Port	06	12	30	in progress

In 2019, Dunkerque-port continues to improve the quality of its emissions into the air by further instaling the cold ironing on containeurs terminal.

3.2.2. Resource consumption indicators

Dunkerque-port has been engaged since 2010 in an eco-responsible action plan for its employees, its own buildings and its process in connection with the reduction of CO_2 emissions. All of its actions are included in the PA2D.

The electricity consumption (buildings, street lighting, security/safety lighting and the consumption of structures) of the port's activities is the main source of CO_2 emissions. It is interesting to note that 70% of the electricity consumption of the port comes from the works and equipments (cranes, pumps, locks,...). These consumptions are directly linked to the activity of the port and certain equipment can be very energy expansive : this is the case of the pumps which consume large quantities of electricity, particularly during periods of flooding in Dunkirk district.

The vehicle fleet is being gradually renewed and an electric car and a hybrid vehicle have been purchased. In addition, there are awareness-raising actions and training of agents in eco-driving.

Code		2016	2017	2018	2019
	number of employees	399	399	390	387
G.10.1	Total annual water consumption (port's building) (m^3)	-	-	2111	2320
G.11.1	Total annual electricity consumption (without customers) (m^3)	10 450 970	10 658 043	7 810 647	7 554 165
G.12.1	Total annual fuel consumption				
	• Diesel for land vehicles (l)	NC	91 815	92 969	in progress
	• Gasoline for land vehicles (l)	0	00	1 715	in progress
	• Diesel for vessels (l)	NC	1 456	1 970	in progress
	• Electric car (% vehicles)	0	0,7	0,7	0,7
	• Fuel for building heating (m^3)		91018	81213	83101

In the 1980-90s to comply with increasingly stringent environmental regulations, particularly in terms of atmospheric releases, many synergies between companies, also known as « industrial symbiosis », were put in place under the leadership of the port-based steel manufacturer ArcelorMittal, in response to constraints of the production process. This led to the launch of a full-scale green industry project in 2000 because industrial firms saw it as highly significant. The inventory of industrial product flows also revealed the potential means of pooling incoming flows, outgoing flows, equipment and services. The study led to the creation of a full-scale decision-making tool, helping to multiply inter-industry product flows. Produced by the Flandre Dunkirk Town Planning Agency (AGUR), the « Toile Industrielle »[14], an Industrial Relations Network tool, shows the dynamic system

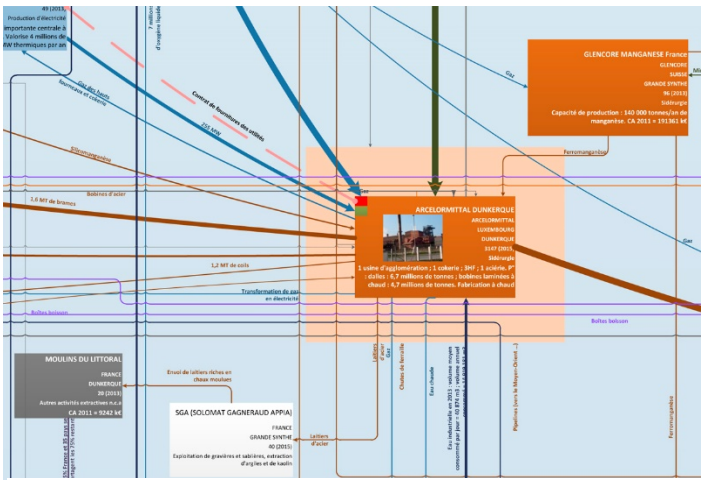


Figure 11 : Toile industrielle (Jean-François Vereecke, AGUR)

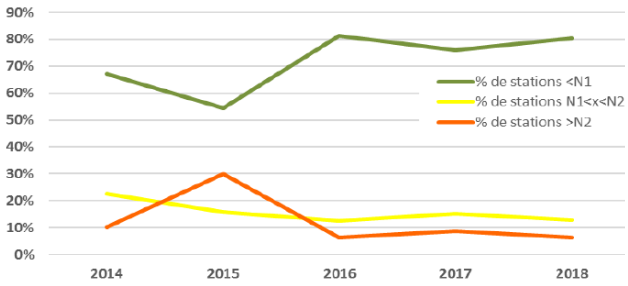
[14] More information :
http://www.agur-dunkerque.org/etudes-projets/article13

of relationships and contacts between companies and suggests possible partnerships for the setup of an environmental and resource network. Today this tool serves as a basis for the development of the circular economy between industries for an ecological transition.

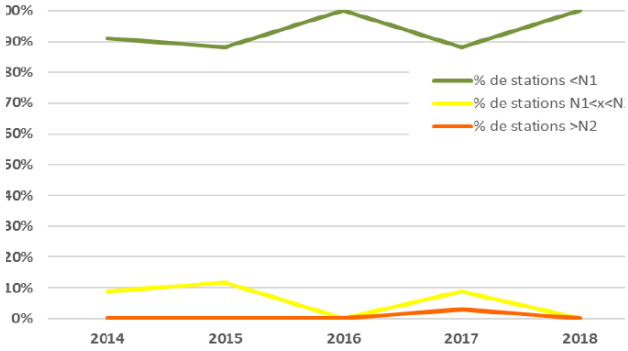
3.2.3. Sediment quality

-	Evolution of sediment quality in harbour basins
-	Evolution of sediment quality in coastal area

The dredging master plan (SDD) includes a major system for monitoring the quality of sediment and water in the port area but also along the coast from Dunkirk to the Belgian border. As a result of the efforts to reduce pollution, sediment quality has improved overall.



Evolution de la qualité des sédiments dans les bassins portuaires



Evolution de la qualité des sédiments dans la zone littorale

3.2.4. Waste management

Figure 12 : Liquid waste collection

The port has set up a policy for shared management of ship waste, through a ship waste collection and treatment plan approved by Prefectural decree on 5 August 2015[15]. In accordance with the provisions of the MARPOL Convention, the port of Dunkirk has all the equipment necessary for collecting operational waste and cargo residues (solid and liquid) from ships.

The waste produced by ships consists of oily waste, harmful liquid substances (chemicals), wastewater and miscellaneous waste (soot, detergents, paints, sweepings, plastics, dunnage, shoring, lining materials, packaging, cloths, glass, food waste and so on). Fixed skips are available for ships' solid waste, with selective sorting (MARPOL points). Liquid waste is collected at

[15] The Waste Masterplan is available online on the Dunkirk-Port website http://www.Dunkirk-port.fr/index.php?cmpref=41101&lang=fr&module=media&action=Display

the request of the ship's agent by truck or barge. Collection is done by accredited companies. In 2020, Dunkerque-port will update its waste masterplan.

Code		2019
G.22.3	Percentage of disposal methods of port waste (%)	
	• Recycling	15
	• Incineration (Energy recovery)	0
	• Controlled landfills	85

3.2.5. Port development indicators

The Port of Dunkirk needs to maintain the necessary draughts for shipping in all its docks.

In agreement with governmental departments, Dunkerque-port carried out repair and reinforcement Port Infrastructure Works with dredged "safe" sand without contamination above the regulatory thresholds in force (heavy metals, TBT, HAP and PCB), in order to protect its coasts and shores against erosion and the advancing water. In 2014, This first large-scale operation (1,500,000 m3) reinforced the Digue des Alliés in order to provide better protection from exposure to storm swells. Today, beach renourishment may subsequently be repeated on other sites if the need arises, as Digue du Break in 2019.

Figure 13 : Digue du Braek beach renourishment

Figure 14 : Dredged treatment platform

Rigorous analyses have shown that in a few inland docks, the dredging operations encountered silt sediment with a level of contamination above the regulatory thresholds, that not allow them to be returned to the aquatic environment. To compensate for the impossibility of dumping this sediment, Dunkerque-port has implemented solutions for onshore management and recycling of so-called "undumpable" sediment after a precise definition of the contaminated sectors identified. This approach, begun in 2009 with universities[16], is part of a circular

[16] more information
http://www.sedilab.com
https://ecoseddigital.wp.imt.fr/

economy dynamic, replacing the systematic dumping of these materials which are considered as waste. The Port of Dunkirk has developed a treatment platform of 6 hectares, operating on the principle of natural dehydration, that can handle 60,000 m3 of silt per storage campaign. After treatment on the platform the silt, previously waste, is recycled in Ecodesign landscaping (92%), which contributes to the creation of a nature enclave within the port's green and blue corridor; roadbuilding (25%); concrete blocks (13%) for sea defence and different aggregate.

Code		2016	2017	2018	2019
G.24.1	Annual quantity or volume of dredged sediment (m^3 *in situ*)	4 352 023	3 458 823	2 725 893	in progress
G.24.3	Dredged sediments going to beneficial use (m^3 *in situ*)				
	• Creation of land (for building new areas in ports)	331 161	192 570	155 174	114 320
	• Recovery of beaches	0	0	192 313	in progress
	• Recovery quay walls	0	16 142	4 517	26 666
	• Polluted dredging sediment rehab (deshydrated via treatment platform)	22 681	20 058	16 217	in progress
G.24.4	Polluted dredging sediments (m^3 *in situ*)	52 460	44 291	65 094	in progress

All dredging operations and destination of sediments dredged are listing into Dredging Master Plan[17] (SDD) which the port of Dunkirk has followed since 2010.

3.2.6. Biodiversity affectation

Dunkerque-port drew up a Natural Heritage Master Plan (SDPN)[18], representing a full-scale green and blue infrastructure for the whole port district, a strategic tool designed for the structuring and planning of actions to preserve and enhance the natural environments of the port's territory[19].

The aims of the SDPN were therefore to preserve the natural heritage in nature enclaves (biodiversity hubs), and reinforce the functionalities by ecological corridors, in an iterative approach of anticipating future

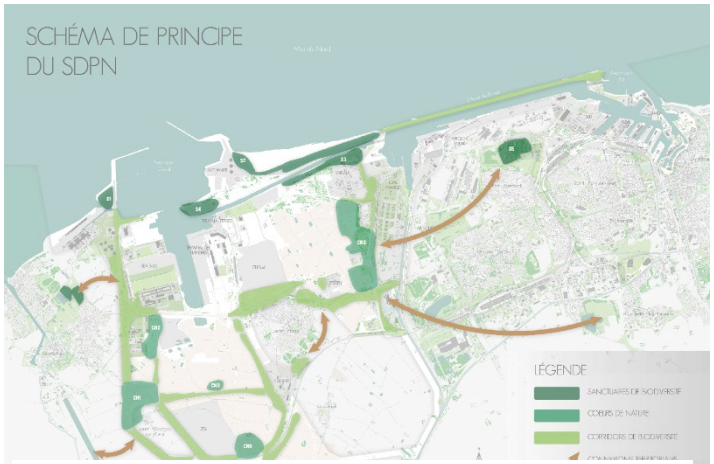


Figure 15 : Natural Heritage Master plan

[17] The Dredging Master Plan booklet is available online on the Dunkerque-port website : http://www.Dunkirk-port.fr/fr/capitainerie/developpement-durable-Dunkirk-port.html

[18] The Natural Heritage Master Plan booklet is available at : http://www.dunkerque-port.fr/index.php?cmpref=49662&lang=fr&module=media&action=Display

[19] « Nature in port » is available at :

development projects and preferential siting of their future compensatory measures. The policy was drawn up jointly with the area's operators and is fully integrated in the green and blue corridor of the Dunkirk area.

Finally, each of these newly created nature enclaves and corridors is subject to a multi-annual management plan for optimum deployment of the biodiversity. Monitoring of fauna and flora is organised with local environmental associations.

In the framework of the SDPN, the inventories were regulary updated at the broader scale of the district. All these data have been organised in a SIG database.

Code		2016	2017	2018	2019
G.17.5	Total port area protected	256	256	259	259
-	Percentage port area protected of port district (%)	4%	4%	4%	4%

Also Dunkerque-port has developped its own biodiversity index, to quantitatively and qualitatively assess the state of health and the biodiversity richness of the port's territory, based on indicator species. The results show a balance of biodiversity on the port area.

Code		2011	2018
-	Ecobalance biodiversity, index for port district (number of points)	15712	15095

3.2.7. Environnemental management

The Sustainable master plan (PA2D) and Safety & security plan (QSE) set out priority goals and actions for achieving environmental targets and beneficial use objectives over the coming year. The progress of the actions is monitored, environmental crime and environmental non-compliance are reported.

Code		2014	2015	2016	2017
G.23.3	Total annual budget allocated to environmental protection (k€)	7367	3768	5285	3933

Code		2016	2017	2018	2019
	Progress of PA2D in %	74%	78%	84%	90%

Dunkerque-port informs the public and other interested parties about its environmental performance and the progress of the port's undertakings as made in its strategic documents (PA2D, QSE, Strategic masterplan). In the framework of the PA2D, the port of Dunkirk conducts this type of

http://www.dunkerque-port.fr/index.php?cmpref=64097&lang=en&module=media&action=Display

information campaign through a report on the actions undertaken to promote sustainable development of the port district.

Figure 16 : Matinales (Sustainable day event) Dunkerque-port

In addition, the «Matinales»[20], « Sustainable days events » are organised by the port of Dunkirk, bringing many players together to discuss tipical subjects covered by the PA2D of Dunkirk's port and city. Fully in line with the governance put in place under the PA2D, these events guarantee effective consultation between Dunkirk-Port and its partners. They take the form of plenary discussions during the morning and continue in the afternoon with a field visit specific to the subject under discussion. These events, real tools for reporting, allow the public to appraise and comment on the progress of the port's undertakings for the environment and the development of its district.

Code		2016	2017	2018	2019
G.23.10	Percentage of employees working on environmental issues (%)	6.5%	6.5%	6.6%	6.7%
G.23.12	Percentage of port employees that received environmental training	8.5%	8.5%	15.3%	25.8%
G.23.16	Annual number of conferences that the port authority has organized or participated in				
-	Number of environmental events organised or supported ("Matinales" - Sustainability Mornings, "Semaines de la Mer" - Sea Discovery Weeks, etc)	19	14	20	18

In addition, numerous information campaigns and training courses on best environmental, practices are carried out several times on year. These event may also cover practices related to the health or safety of employees.

Figure 17 : Health day Dunkerque-port

[20] A report on the latest Sustainable Development Days is available at : http://www.dunkerque-port.fr/fr/capitainerie/developpement-durable-dunkerque-port.html

Code		2016	2017	2018	2019
G.23.21	Annual number of environmental incidents				
-	Number of infringement records and/or formal notices for pollution involving ships in commercial operation, during provisioning or when moored	01	0	01	01
-	Number of simplified comparative inspections (VSC) of port structures	27	0	107	in progress
-	Number of new contract of discharges water with industrie	02	01	01	01 (+ 3 update)

All of the port's structures are regularly inspected using the V.S.C. method, a CEREMA tool[21] in the management of infrastructure assets. This diagnosis allows the programming of monitoring and maintenance actions.

Moreover, Dunkerque-port drew up a Sewerage Master Plan (SDA) in 2010, to define the actions which the port must carry out to bring the port sewerage networks into compliance and set the targets to be achieved in terms of discharge. With the Dredging Master Plan (SDD), its aim is to improve the quality of the aquatic environments and particularly the quality of the harbour water, in line with the quality targets set in the Water Framework Directive (WFD) and the frencg Water Management and Development Master Plan (SDAGE). To reduce the sources of pollution in transitional waters and therefore in coastal waters, one of the SDA action is to sign a contract with industries imposing the knowledge of discharges into water and technical solution at the outset.

Figure 18 : Percolation trech

[21] More information :
https://www.cerema.fr/fr/actualites/methode-visites-simplifiees-comparees-vsc

4. DOCUMENTED RESPONSIBILITIES AND RESOURCES RELATING TO ENVIRONMENTAL ASPECTS

4.1. Organisation of Dunkerque-port

Dunkerque-port is directed by the Executive Committee which is formed of four people and chaired by the Chief Executive officer who is appointed by decree. This body's decisions are collegial in accordance with the law: "The executive committee directs the establishment and is responsible for its administration. To this end it is vested with the broadest powers to act in all circumstances in the name of the major sea port". However, its chair has sole authority to manage the staff, which means that he has the capacity of employer.

The organisation of Dunkirk-Port is shown in the diagram below[22].

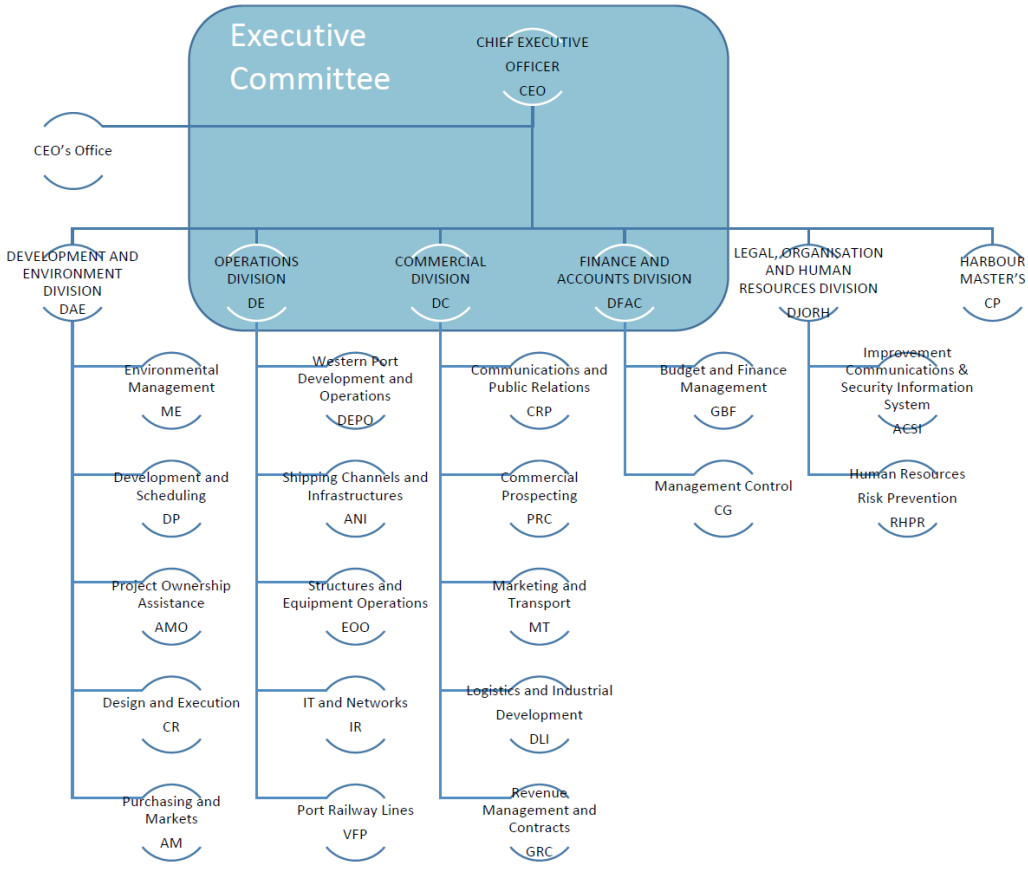


Figure 19 : The organisation of Dunkerque-Port

Alongside this, and following on from the 2008 ports reform, the organisation of Dunkirk-Port is based on strong governance involving many local players within two bodies, the Board of Trustees

[22] See the complete organisation chart inside 2019 activity report : http://www.dunkerque-port.fr/index.php?cmpref=61757&lang=fr&module=media&action=Display

and the Development Board, which are also supported by an audit committee. These governing bodies are composed of government representatives, delegate of local and regional authorities, executive representatives, and qualified persons who intervene in the decisions of the establishment. Note that this entire organisation is placed under the control of the government, and of two ministers in particular. The diagram below shows the port's system of governance [22]:

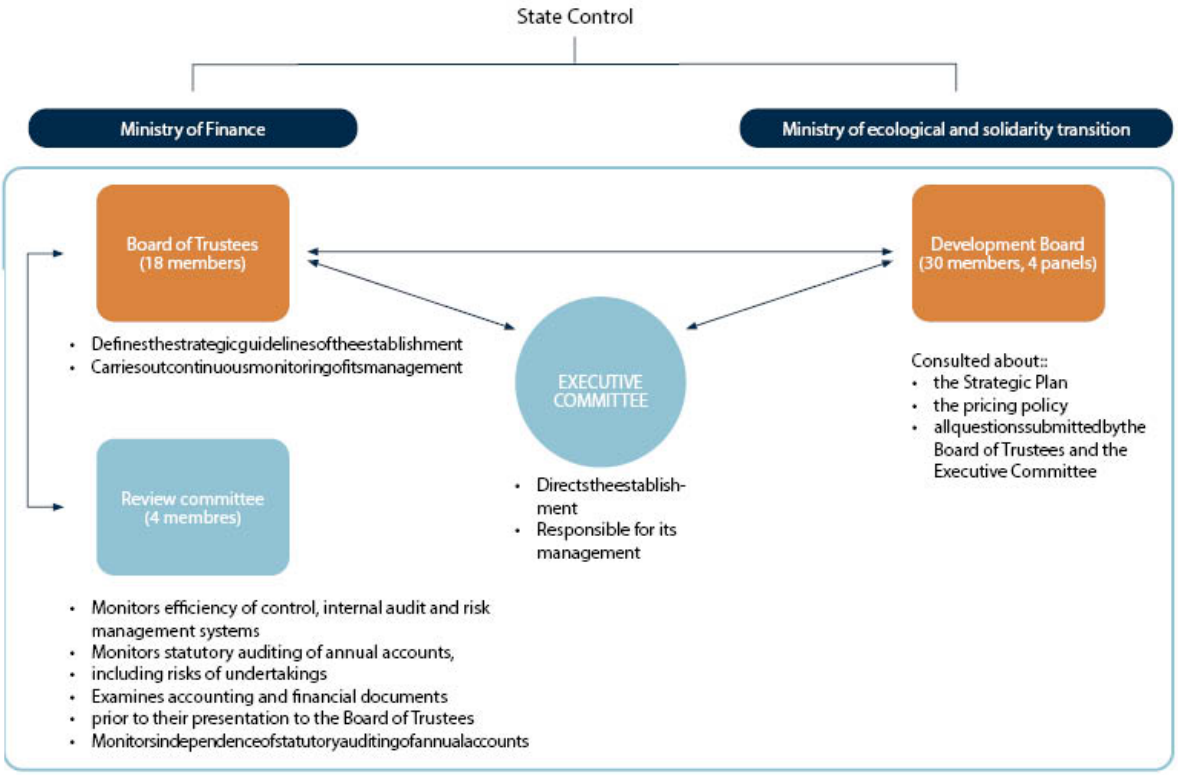


Figure 20 : Dunkerque-Port's system of governance

4.2. Environmental responsibilities of key staff

The resources, roles, responsibilities and powers are defined in the port's internal process « Management of Human Resources » that is available for consultation on the premises of Dunkerque-port (Ref PCS.6001). The purpose of this document is to ensure that, the company has the appropriate human resources with the required skills to accomplish its missions, in compliance with legal obligations.

This process is carried out through skills mapping based on job descriptions. The job descriptions include the objectives and rationale, key skills, technical skills and organisational skills, and in every case the concept of a Safety, Security and Environment attitude and behaviour. The roles and responsibilities are defined by means of diagrams included in each operating method integrated in the port's management system.

The following list indicates those liabilities affecting the environment in the port of dunkirk, which are in the requirements of PERS certification. These are activities that may cause, control or minimize environmental impacts when managed, or may cause environmental impacts if control was lost, or may result in a breach of environmental, safety and security policies guidelines or regulations.

Activity	Dep	Position
Port operations (dredging)	ANI	Head of Shipping Channel and Infrastructures Department
Port operations (navigation)	CP	Harbour Master
Port operations (terminals)	EOO	Head of Structures and Equipment Operations Department
Oversight of wharfs and piers	ANI	Infrastructure Maintenance Manager Maritime and waterway wharfs, Maritime and waterway piers, Fixed bridges
Site administration	RHPR	Head of Human Resources Department Risk Prevention
Scheduling	DP	Head of Development and Scheduling Department
Purchasing of supplies	AM	Head of Purchasing and Markets Department
Licences / Permits	DP	Design Office Manager
Quality management	ACSI	Head of Continuous Improvement and IT Security Department
Management of on-site contractors	DLI	Head of Logistics and Industrial Development Department
Emergency planning	CP	Harbour Master
Waste management	ACSI	Environmental Quality Coordinator
Environmental management	ME	Head of Environmental Management Department
Management of environmental data	ME/ DP	Environmental Research Officer Geomatician / Geographic Information System
Assessment of soil pollution	ME	Environmental Research Officer
Monitoring of air quality	ME	Ecology and Communications Assistant
Energy and carbon footprint	ME	Sustainable Development Research Officer
Monitoring of water quality	ME	Environmental Research Officer
Noise management	ME	Ecology and Communications Assistant
Vehicle fleet management	EOO	Head of Structures and Equipment Operations Department
Port signage	DP	Design Office Manager
Maritime traffic management	CP	Deputy Harbour Master
Control of natural and technological risks	DP	Design Office Manager
Environmental communication	ME	Ecology and Communications Assistant
Environmental coordination of worksites	ME	Environmental Research Officer
Monitoring of biodiversity	ME	Sustainable Development Research Officer
Regulatory monitoring	ME	Environmental Research Officer
Port security	CP	Security Manager

Table 2 : responsibilities of key personnel

4.3. Memberships & stakeholder management

Memberships in associations and interest groups Dunkerque-Port is a member of the following associations and societies as Agence Française de la Biodiversité, Agence de l'eau, Norlink port,

CERDD, GEODE, Natura 2000 networks, AIVP, Chamber of Commerce and Industry, Forum des aires marines protégées….
Relevant stakeholders/stakeholder groups in Dunkirk-Port were identified in connection with the quality certification (ISO 90001) in an internal workshop with the involvement of experienced colleagues from Environmental and Quality Management, Harbour Master and Operation divisions, Development, Controlling and Finance departments. Owing to Dunkerque-ports' port management activities and the resulting broad field of business involving highly diverse duties, the number of relevant stakeholder groups that must be considered is high.
All the stakeholders and stakeholder groups identified by the internal working group with claims on Dunkerque -port are given in the following list, checked and updated on a regular basis. The following overview shows the frequency or cycle of engagement with stakeholders and what form this usually takes. This register of "interested parties" which lists all the players who intervene in the port's activity is available for consultation on the premises of the port of Dunkirk. This table ensures correct integration of stakeholders' expectations and the port's obligations.
The various groups pursue very different objectives and require Dunkirk-Port to take different approaches to exchange together : formal works meeting, newsletter, series of routine and ad-hoc meetings facilitate full information sharing.
In addition, to maintain customer contacts, Dunkirk-Port uses various means (meetings, working groups, workshops, events, trade fairs, and the like), to facilitate mutual information on optimum location specific offerings and solutions.
Finally, the website www.dunkerque-port.fr is open to the public. It contains extensive information on the port's activities.

Stakeholder groups (non exhaustive list)	Stakeholder engagement	
	Frequency	Form
Employees and executive commission		
Staff	At least 2x/y	Meeting with the managing directors/annual performance review
Board of trustees	4x/y	Meeting with the managing directors
Development board	4x/y	Meeting with the managing directors
Trade unions	Regular	Meeting
Chamber of labor	Regular	Meeting
Works councils	Regular	Meeting
Authorities		
State government	Regular	Project-specific working groups
Environmental authorities	Ongoing	Project-specific working groups
State agencies	4x/y	Meeting with the managing directors
Local authorities	Ongoing	Project-specific working groups
Regional authorities	Ongoing	Project-specific working groups
Society		
Press & media	Regular	All required and project-specific
Universities, school & research institutes	Ongoing	Project-specific working groups
Port museum & Port center	Ongoing and at least 2x/y	Project-specific working groups
Non-governmental organization	Non-regular	As required Project-specific working groups

Customers		
Industry asociations	Regular	Meeting
Trade association	Non-regular	As required
Industries	Non-regular	As required
Fishermen trade	Rare	As required
Farmers chamber	Non-regular	Meeting
Farmers	Rare	As required
Shippers	Regular	As required
Shippers agents	Regular	Meeting
Port service providers	At least 1x/y	Meeting with the managing directors/annual performance review Project-specific working groups
Hunters	Regular	As required
Representatives of other ports		
ESPO	Rare	Meeting
French port institution	Regular	Meeting
Partners		
Boatage operations	At least 1x/y	Meeting with the managing directors/annual performance review Project-specific working groups
Maritime pilots	At least 1x/y	Meeting with the managing directors/annual performance review Project-specific working groups
Towage services	At least 1x/y	Meeting with the managing directors/annual performance review Project-specific working groups
Suppliers		
Construction firms	Ongoing	Project-specific working groups
Waste, material and energy suppliers	Ongoing	Project-specific working groups
Provider of studies, surveys and plans	Ongoing	Project-specific working groups
Providers of capital		
Investment bank	Rare	As required
European funds	Rare	As required

Table 3 : extract from interested parties register

5. CONFORMITY REVIEW OF ENVIRONMENTAL PERFORMANCE AND LEGAL REQUIREMENTS / ACHIEVEMENTS AND PLANNED ACTIVITIES

This environmental report demonstrates in chapter 3 the detailed analysis of environmental impacts, the legal standards for port-related activities and environmental policies for Dunkerque-port.

The monitoring of legal requirements in chapter 3.1, the EPi's in chapter 3.2 and the monitoring of policy requirements in chapter 3.1 show the relevant indicators and aspects that are monitored for several years. They are in line with PERS standards and show a positive trend. If not, explanations are given and it can be assumed that in the coming years the trends gets better. So far, the port administration has been able to meet the legal standards of environmental legislation.

Furthermore, according to the environmental policy and the PA2D, the Dunkerque-port is taking steps over notably for the dredging and the biodiversity and beyond the legally required environmental standards and installed with an ambitious continuous improvement policy.

5.1. Resources

All the documentation relating to the management system is available on « SYMPAD », our Internal computer application of our Intranet. The documentation is available to all the staff either via their workstation computer or via a shared computer which they can use. This documentation includes, in particular, the QSE Policy, the directors' meeting minutes and audit reports, the processes and operating methods[23] and the Harbour Master's document management system for the maritime aspect. Similarly, the PA2D and its annual review can be viewed on the Intranet. In 2020, a software dedicated to monitoring indicators and the QSE and PA2D actions programs will be installed to improve your environmental performance. The software will adapt our specific organization by improving sustainable operational performance from the field to top management by monitoring ours several environmental strategies : non-compliances and complaints, equipment and buildings, environmental impact, training, audits and surveys, self evaluation and certifications…

5.2. Conformity review of environmental performance

Sustainable development in the port of Dunkirk is characterized by a process of continuous improvement. The social, ecological and economic goals which we have set ourselves en route to a sustainable port as well as the specific measures in place for achieving the former have been bundled in the PA2D actions plan. This programme is annualy published in the sustainability report and presented on the following pages. The relevant management aspects are presented with a goal, the dedicated measures, the actual status, the timeline and the resulting performance of the year. Results are communiced notably in Sustainable day event As this programme is published, all stakeholders and the public get transparent information about our former and planned activities.

[23] For example, the current documentation that can be viewed in SYMPAD on the operation of the management system comprises :
PAD.PRO.1602 "Environmental analysis"
PAD.REF.1002 "Regulatory monitoring benchmark"
PAD.PRO.1601 "Assessment of compliance with environmental requirements"

Sustainable and environmental priorities according to our PA2D 2014-2018 programme are presented below.

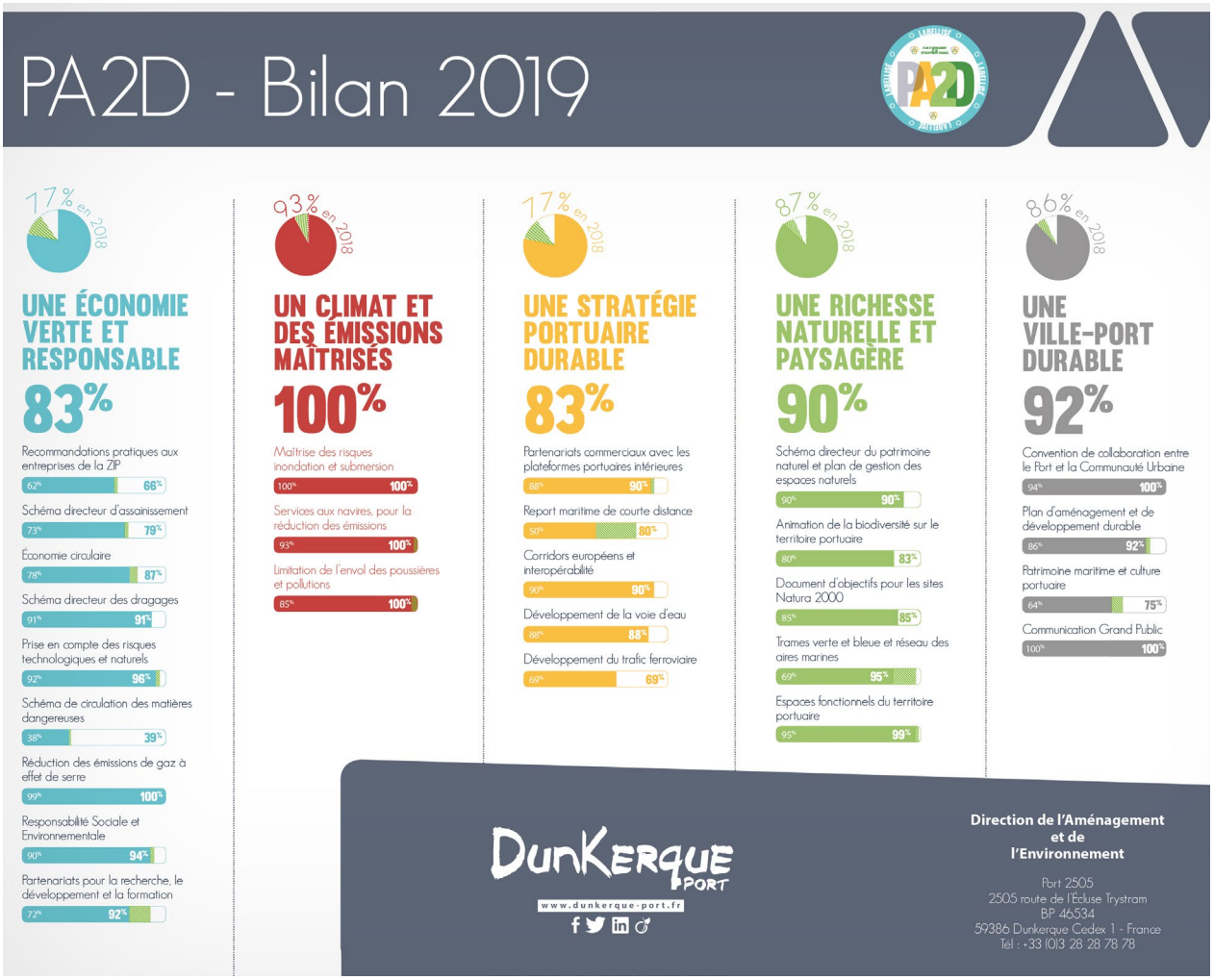


Figure 21 : General 2019 PA2D 2014-2018 status chart

This PA2D 2014-2018 actions program is now finished. In 2019, the latest review showed that 90% of the planned actions have been completed (3.2.7). Since the end of the 2019 year, it has been replaced by a new one the PA2D 2019-2023. The first reporting will take place in 2020.

5.3. Conformity review of legal requirement

Dunkerque-port must ensure that its environmental performance is compliant with legislation and with the port's environmental policy. The compliance analysis, however, must not end with a declaration of compliance for each legal requirement, but must provide information to identify the measures for improvement which are and will be necessary to maintain or restore compliance with legislation or other standards.

In 2019, 2113 legal requirements have been identified, as well as the recommendations made in Prefectural decrees. As concerns the latter, reviews are conducted every year and the conclusions forwarded to the competent government departments for assessment of their compliance with recommendations. A software for management of monitoring and assessment of compliance, the QSE Compliance service, is used to implement the regulatory monitoring. It includes the topic, the status of the article, the date of the conformity assessment, the person responsible for the assessment, the results and the justifications.

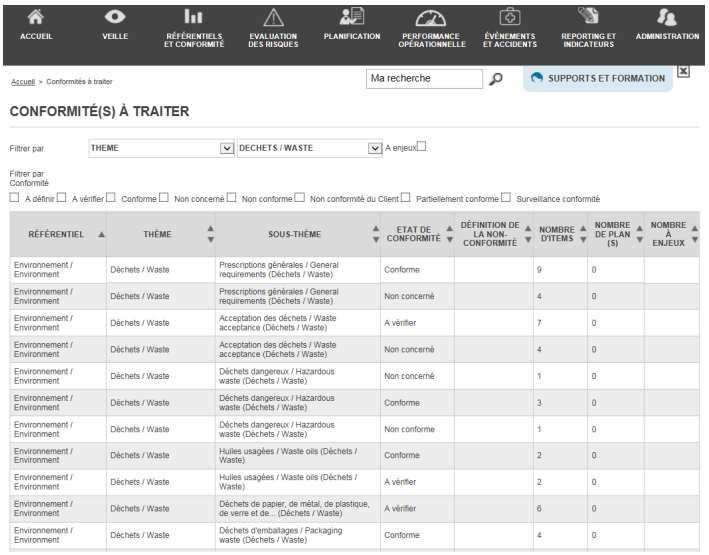


Figure 22 : screenshot of the compliance analysissoftware

This allows consultation, retrieval and updating of the regulatory benchmark and regulatory monitoring. The analysis of compliance is carried out in its entirety over a period of 3 years.

In 2019, the last review showed that on the environmental legal requirement we are 97% up to date.

	Compliant	Partally compliant	Non compliant	uninvolved
Environnement	289	17	52	1496
Energy	0	0	259	259

Note that, as part of its management system, internal audits may be initiated to assess the compliance of the port's environmental performance. The services of an outside service provider may also be enlisted for this type of assignment. Since 2014, internal and external audits have been carried out, the reports and the list of internal auditors are available for consultation on the premises of Dunkerque-port.

6. SELECTED BEST PRATICES

In the framework of the PA2D, Dunkerque-port follows a proactive policy in favour of sustainable development of the port district. Since its launch in 2014, and even before then, many actions have emerged that have made Dunkirk an exemplary port nationally. Among many examples of this are the dredging and recycling of undumpable sediment, the management of biodiversity in the port's green and blue infrastructure, the recycling of materials as part of the circular economy, adapting to climate change, and improving the quality of the air.

These topical subjects, forming an integral part of the ESPO's environmental priorities, are the subject of special attention by Dunkerque-port in light of the issues which they raise.

Figure 23 : ESPO's environmental priorities

The rest of this document contains a selected sheets giving significant actions implemented in the last two years by Dunkerque-port in order to address the environmental aspects associated with the activities and businesses on its area. There are positive indications of the port management's ability to deliver environmental protection and sustainable development. They provide the ESPO reviewer with tangible evidence of achievement and contribute to several publication from ESPO[24].

The PERS application in 2018 described :

- Adapting to climate change
- Re-sanding of the Alliés Breakwater beach
- Natural Heritage Master Plan
- Environmental coordination
- Ship waste management
- Green industry and circular economy
- Governance and community integration
- Control of airborne dust in the Western Port bulk terminal
- Air quality – Modelling of emissions
- Sustainable management of rainwater in the Eastern Port of Dunkirk
- Recycling of undumpable dredging silt

In this report, we highlight :

- O industrial site redevelopment
- Employee sensitization
- A convention to open Dunkerque-port company to the youth of the working-class neighborhoods
- Environmental requirements guidelines for industries
- Green accounting

[24] https://www.espo.be/publications/espo-green-guide-towards-excellence-in-port-enviro

https://www.espo.be/media/Environmental%20Report-2019%20FINAL.pdf

Old industrial sites redevelopment

1. Project description

Contexte	As a developer of its territory, and although it has a substantial land reserve, it appeared necessary for Dunkerque-port to optimise the port space and its land consumption, notably with regard to the diversification of the expected uses of the port area. First, old industrial sites, areas which lost their former production, transport or infrastructural functions, brownfields possess a strong development potential : development of maritime traffic and multimodality (maritime, road, rail and river infrastructure needs) ; development of renewable energies ; development of water, gas, electricity and heat supply networks for future activities (need for technical corridors) ; hosting new activities and creation of new inter-industrial synergies (in particular through pipes) ; hosting compensatory biodiversity projects ... Secondly because of existing activities such as agriculture which should be preserved as much as possible.
Procedure	A plan detailing all the industrial areas to be reconverted, as well as railway abandonments and industrial brownfields. Depending on the future use of the site, technical studies are carried out to define the actions to be implemented in order to reconvert the industrial site: deconstruction, soil diagnosis, establishment of a management plan for the decontamination if necessary, hydraulic and geotechnical characteristics of the soils, presence of easements and associated constraints, etc. This is followed by support for the company wishing to develop an activity on the site undergoing conversion.
Timescale	In 2013, the old EDF power industry, dating from 1962, was deconstructed. The freed and cleared land was then put back on the market. Thus, in 2016, the industrialist ECOCEM signed an agreement to make available a 4 ha surface area to accommodate a cement production unit produced from ArcelorMittal's blast furnace slag.

	Currently, Dunkerque-port is working on the reconversion of the site of the old refinery SRD, the deconstruction of which was completed in 2019 for the surface infrastructures. The ground diagnosis is currently in progress. Other sectors are currently undergoing similar studies for the development of renewable energy production units.
Cost	EDF was responsible for financing the deconstruction of its power installation.

2. Environmental aspects concerned

Soils, water, air

3. Operators concerned

DREAL Hauts de France
IDRA

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5. Documentation

Dunkerque-port internal reference documents :
Strategic master plan 2014-2018
Strategic master plan 2019-2023
PA2D 2019-2023

Website
Dunkerque-port (http://www.dunkerque-port.fr/)

Employee sensitization


Au boulot à vélo


Biodiversity plantation


Mobility rally


Ocean waste

1. Project description

Contexte	The efficiency of any management system is highly dependent on staff support. As a state-owned establishment, Dunkerque-port is destined to play a leading role in the ecological transition. It is based on an eco-responsible action plan included in the PA2D to contribute directly to modes of travel, consumption, heating and purchasing that have a reduced impact on the environment. In addition to operational actions, number of operations to raise staff awareness have been planned. Since severals years, many seminars on mobility, waste and resource efficiency, nature and biodiversity to help them identify, document and suggest improvements in their daily lives at home or at the company. Established with management, a calendar of events is planned for the year.
Procedure	Dunkerque-port prefers playful workshops rather than didactic ones, so the message is better understood. The last workshop was intended to develop and implement an eco-friendly mobility plan project. In the form of a competition (team rally), employees had the opportunity to test alternative modes of transport to get to work. This challenge complemented another action on mobility « Au boulot à vélo », since 12 years, which offers employees the opportunity to come to the office by bike for several consecutive days in the form of a bike convoy. These two events have the particularity of not being limited to Dunkerque-port employees only, but being open to other companies in the Eastern port around the main port building. Its actions not only promote the reduction of climate impacts, but also create a link between companies in the port area.

Timescale	Every year. Agenda available at website home page http://dunkerque-port.fr/
Cost	< 6000€

2. Environmental aspects concerned

water, air, energy, biodiversity, waste

3. Operators concerned

DREAL Hauts de France

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5. Documentation

Dunkerque-port internal reference documents :
PA2D 2014-2018
PA2D 2019-2023

Website :
http://www.dunkerque-port.fr/
http://www.nord.gouv.fr/Actualites/Actualites/Au-boulot-a-velo-10eme-edition-Les-7-et-8-juin-2018-a-Dunkerque-prenez-le-convoi-velos
http://www.nord.gouv.fr/Actualites/Actualites/Au-boulot-a-velo-11-eme-edition-les-6-et-7-juin-2019-a-Dunkerque-prenez-le-convoi-velos

A convention to open Dunkerque-port company to the youth of the working-class neighborhoods


PAQTE Signature


Secondary student


Logistics students


Environmental discovering

1. Project description

Contexte	The PAQTE (a « pact between neighbourhoods and businesses »), an initiative of the Ministry of Territorial Cohesion, is a support programme for all those who want to work towards a better economic inclusion of the inhabitants of the territories. It is a concrete approach that concerns the whole company with four pillars : Raising awareness, Training, Recruiting and Buying. Since 2019, Boatage, Pilotage, Towage and Dunkerque-port wished to collaborate through this convention to set up a discovery trail of port professions. Alongside all the port stakeholders, Dunkerque-port is committed to a solidarity-based approach in order to amarinate the population and give rise to new vocations.
Procedure	Three types of actions are implemented : - Raising the awareness of young people to the world of business, through internships or interventions in schools. Plusieurs collaborateurs interviennent dans les collèges et lycées et universités du territoire pour présenter les métiers du port. Des offres de stages sont aussi publiées. - Access to work-study programs, to allow the professional integration of young people in the neighbourhoods, but also the recognition of skills. To support this approach, Dunkerque-port will offer its employees who wish to pass on their know-how a tutor training course to help them in their commitment as apprentice tutors. - Promoting recruitment without discrimination, to training managers and Human Resources teams in non-discrimination. With other companies, it also supports young people from the neighbourhoods in their job search.

Timescale	Since 2019
Cost	Internal cost

2. Environmental aspects concerned

-

3. Operators concerned

IMPACT / BPI France

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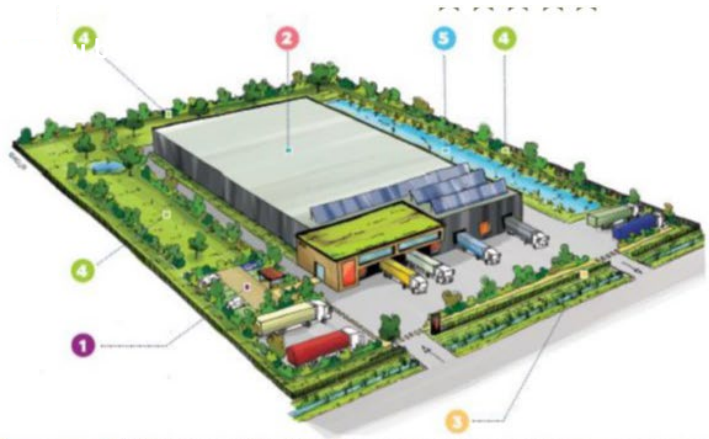
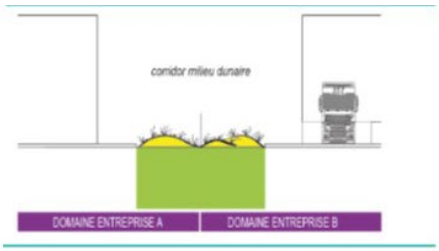
5. Documentation

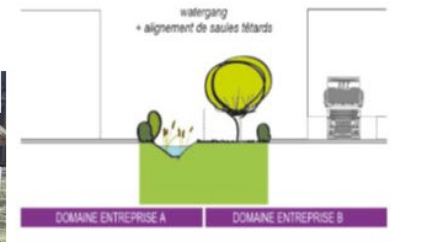
Dunkerque-port internal reference documents :
PA2D 2014-2018

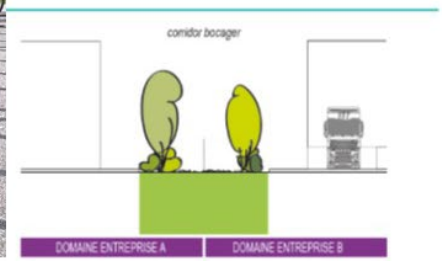
Website :
http://www.paqte.fr/

Environmental requirements guidelines for industries









1. Project description

Contexte	The requirements for occupying the port area do not impose landscape and ecological quality objectives. This additionnal document suggests a few ideas for the development in order to help instrustrie to compose a landscape and an ecological network of quality, adapted to the location, favourable to the brand image of its business and offering a pleasant working environment for its staff and visitors. In cat, the fragmentation of biodiversity on industrialized land is minimise, the continuity of non-artificialized areas preserved on industrialized land will make it possible to create an ecological and landscaped network contiguous to the SDPN areas. « The environmental requirements guidelines » is a set of planning tips and advices for industries for better construction in port area. The document provides guidance on biodiversity planning, water management, fencing, buildings, mobility and parking.
Procedure	As part of the revision of the conditions of use of the port area by new industries, dating from 1998, a guide to good environmental practices, « the environmental requirements guidelines » was drawn up in partnership with the Dunkirk Urban Planning Agency. This document was drawn up in consultation with the industrialists and is now attached to all new contracts.
Timescale	Systems put in place gradually since 2018

Cost	< 10 000€

2. Environmental aspects concerned

water, air, energy, biodiversity

3. Operators concerned

-

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5. Documentation

Dunkerque-port internal reference documents :
PA2D 2014-2018

Website :
http://www.dunkerque-port.fr/

Green accounting




1. Project description

Contexte	The development of a sustainable accounting system is a voluntary approach by the Dunkerque-port, started in 2016 to evaluate as possible, all the actions and financial resources implemented by the port on environmental actions. The objective of this « green accountingé is to : - Analysing the costs resulting from the management and protection of the environment by the port's activities ; - Analysing the costs of projects, biodiversity offsets, waste management... over several years ; - Anticipate the potential balance sheets required by the State and the banks ; - To be one of the prospective elements in the requests for EU subsidies ; - To be one of decision-making tool for projects.
Procedure	The methodology used is iterative. An initial scope was defined on the basis of information held by Management Control at the time, and then numerous interviews were conducted with operational departments. This first stage made it possible to deliver an initial document based mainly on accounting data. Then, after additional training and staff meetings, the configuration of the IT applications in 2017 led to the production of a complete report containing financial information, data arguments and technical information. Green accounting is a non-definitive statement that will be subject to change as a result of activity, regulation and further analysis.
Timescale	On repotring by year

Cost	Internal cost

2. Environmental aspects concerned

water, air, energy, biodiversity, sediment, buldings, pump

3. Operators concerned

all

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5. Documentation

Dunkerque-port internal reference documents :
PA2D 2014-2018
Website :
http://www.dunkerque-port.fr/

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ECOPORTS

ESPO