

# adito

France's largest port, where more than 8,500 ships call every year, along with nearly 3 million passengers<sup>1</sup>. It is also a port that manages an area as large as the city of Paris, and is responsible for managing ecosystems rich in biodiversity.

This is because the Port of Marseille Fos is both a 400 hectare port in the city of Marseille and a 10,000 hectare industrial port zone located between Fos-sur-Mer, Port-Saint-Louis-du-Rhône, Port-de-Bouc and Martigues; it is a place for the exchange of goods and meetings between the various players from the surrounding area, from Europe and from around the world; it is a place of interfaces where urban, industrial and logistical structures and ecological corridors must be integrated and harmoniously blended together.

Environmental excellence is a strong ambition that we promote with our economic and institutional partners and which is based on a collective and partnership approach, with the aim of developing the blue economy in a coordinated and sustainable manner.

Whether it concerns transporting containers by train or river barge, financing the connection of ships to the shore power network or managing and restoring areas with a high biodiversity value, our actions should make it possible to reduce the impact of economic activity on the air, water and land, for the benefit of everyone, local residents, employees in the sector and port customers, without jeopardising our economic competitiveness.

On the contrary, the continuous improvement of our societal approach to sustainable development must and can be a source of economic opportunities. And the Port's environmental project is indeed a source of jobs, as well as a better quality of life and technological innovations.

The Port of Marseille Fos is resolutely committed to this approach and sought to illustrate this through a shared roadmap: After all, our responsibility is also shared with the shipowners, logisticians and manufacturers who are committed to working alongside us towards creating a green port to serve the blue economy.

<sup>1-</sup>figure 2019

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### THE PORT IS CONTINUING ITS ENERGY TRANSITION

### TO IMPROVE THE CLIMATE AND AIR QUALITY

The Port is the economic powerhouse of a dynamic region which is committed to the climate and the improvement of air quality. This is why the Port has undertaken a series of concrete actions, designed to achieve these objectives and on which it has decided to invest accordingly, alongside its partners. This endeavour will also enable the development of an attractive ecosystem for green innovation.

#### Connecting ships to the quayside to reduce emissions of CO, and fine particles

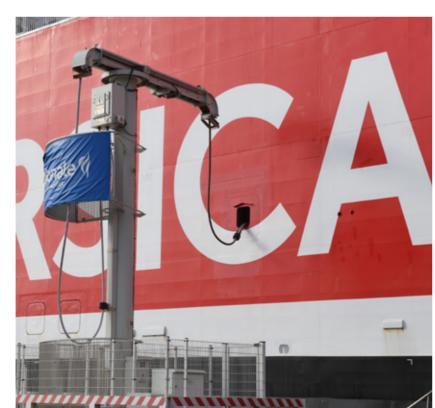


OF THE PORT'S OWN **ELECTRICITY CONSUMPTION** COMES FROM RENEWABLE SOURCES

Ahead of the introduction of regulations, Marseille Fos was the first French port to install electrical connections for ships at the quayside, starting in 2017 for port calls made by the company La Méridionale. The use of dedicated power connectors on the quayside already enables nearly 400 port calls per year to avoid generating atmospheric pollution. The Port of Marseille Fos, with the support of the State and the local authorities, is continuing this effort and is investing more than 50 million euros in the development of electrical connections for ships at the quayside for international ferries, ship repair and cruise ships by 2025. To fulfil this ambition, the energy company Enedis carried out unprecedented work in April 2021, to reach, in combination with local photovoltaic production, a total electrical capacity of 68 MW (green electricity) on the Marseille docks, the largest for a port in France.

The new Cap Janet international shipping terminal currently under construction in Marseille is a landmark project, as its guays will be fully equipped to provide electricity to ships in port.

In addition to the projects under way in the Marseille docks, studies have been carried out on the container terminals in the Fos docks.



#### **400 PORT CALLS PER YEAR** HAVE BENEFITED FROM THE ELECTRICAL CONNECTION OF SHIPS TO THE QUAYSIDE **SINCE 2017**

#### A cruise operation committed to improving

#### air quality in Marseille

After a 17 month shut-down due to the global health crisis, France's leading cruise port began gradually resuming its activities in June 2021. The entire industry has been undergoing a transformation for several years to better meet societal and environmental requirements; this stoppage has intensified their efforts both on the current vessels and in the choice of engines for the ships on order.

During the Blue Maritime Summit, organised by the Marseille Provence Cruise Club in 2019, the Port of Marseille Fos and the most active shipping companies in Marseille committed themselves, by signing a Blue Charter, to respecting rules that are much more stringent than national and international regulations (and than the future SECAMed zone).

This charter requires compliance with four fundamental rules

- the use of shore power from 2025 for ships fitted with the equipment,
- the use of 0.1% desulphurised fuel or any other solution that reduces the environmental footprint of fuels, such as scrubbers and other catalytic converters, as soon as they enter the Port's regulatory area
- the hosting of LNG-powered ships and the development of a specialised sector,
- and the reduction of speed to 10 knots upon entering the Port's regulatory area.

This commitment to air quality, which covers 85% of annual port calls in Marseille, is historic and unique in the port industry.

Marseille Fos, as part of its plans for providing electrical connections for ships docked at the Port, intends to be able to connect two cruise ships simultaneously from 2025. In addition to the guaranteed 100% renewable energy supplied by ENEDIS, and in order to meet the energy needs of the ships, the Port will produce its own energy using photovoltaic power units that will be installed on its warehouse roofs.

#### **EMISSIONS DECREASING** SINCE 2010 AND STRONGER **MEASURES DURING** AIR POLLUTION PEAKS

Since 2010, the regulators (IMO/EU) have tightened their requirements for shipping emissions. All ships remaining at the quayside for more than two hours must use fuel oil with a sulphur content < 0.1%. As a result, sulphur emissions in the Port of Marseille have decreased by 40% in 10 years. In addition, from the first day of an ozone pollution alert in Marseille, the speed of ships may not exceed 10 knots (18km/h) near the Port and 8 knots in the docks.

#### **Innovating** with the supply of low-carbon gas and hydrogen for heavy goods vehicles and the refuelling of ships with liquefied natural gas (LNG)



NATURAL GAS STATION FOR HEAVY GOODS VEHICLES IN THE REGION

HIGH PRESSURE HYDROGEN FILLING STATION FOR LONG-DISTANCE TRUCKS The Mât de Ricca parking and service area for heavy goods vehicles, set up by the Port of Marseille Fos, is located near the container terminals and the Distriport logistics zone in the municipality of Port-Saint-Louisdu-Rhône. It is accessible 7 days a week, 24 hours a day and hosts the region's first natural gas station for heavy goods vehicles (Vgas station operated by Proviridis). Marseille Fos is thereby supporting the conversion of heavy goods vehicles to this clean energy.

In 2022, Air Liquide will open the first high-pressure hydrogen service station for long-distance trucks in the Fos port area. This project, launched in 2017 and called HyAMMED, has brought together many players in the region to produce low-carbon hydrogen, build trucks, install the charging station and find shippers willing to invest in this approach. This hydrogen is now co-produced by the manufacturer KEM ONE. This technology could also be used to power goods trains, buses for employees and residents of the area, as well as ships, initially limited to smaller vessels.

Refuelling of ships with liquefied natural gas (LNG) is one of the leading solutions for making maritime transport even greener. The Port is driving and supporting this transition by hosting and serving LNG-powered ships. Since 2019, LNG-powered cruise ships have been calling at Marseille and in June 2021 the first container ship from the CMA CGM group's LNG fleet docked at the Fos terminals. In 2022, the company Corsica Linea, which primarily provides a territorial link between Corsica and the mainland, will take delivery of its first LNG-powered ferry.

After carrying out refuelling tests by truck in 2017 and obtaining all the regulatory authorisations in 2018, the Port will be able to offer its customers an LNG refuelling barge in early 2022. In the summer of 2021, a 135-metre micro LNG carrier, the Gas Vitality, completed its sea trials. The LNG tanker chartered by Total Energies Marine Fuels will be based in Marseille Fos in 2022 to serve the Mediterranean region.

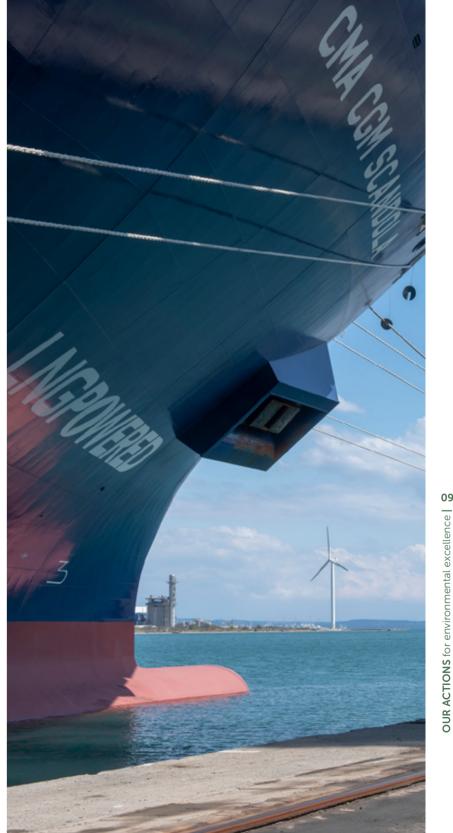


18.600 M<sup>3</sup>

CAPACITY OF THE 1st LNG TANKER BASED AT MARSEILLE FOS (EARLY 2022)



A cleaner pleasure boat with the comfort of a powered ship is a dream come true thanks to the start-up Hynova Yachts, which has designed The New Era, the world's first massproduced electro-hydrogen-powered pleasure boat. Launched in May 2021 in the Port of Marseille, this vessel discharges only potable water and can be rapidly refuelled, unlike electric motors.



#### Making a commitment locally

to combat pollution

The Port is a long-standing and active partner of the Permanent Secretariat for the Prevention of Industrial Pollution in the Provence-Alpes-Côte d'Azur region (SPPPI PACA) a collegiate organisation bringing together representatives of industry, the State, trade unions, non-profit organisations and local authorities. In 2018, the SPPPI launched an initiative to respond more specifically to the demands of local residents regarding Health and Environment around the Etang de Berre: This is the RÉPONSES project, the aim of which is to provide concrete responses and solutions: by establishing a constructive dialogue between the stakeholders, including local residents; by giving impetus to new actions to be implemented; and by providing everyone with centralised, independent, accessible and reliable information on the health and environmental situation and the actions being taken to improve it. Three years after its inception, the RÉPONSES project is beginning to bear fruit.

The first citizens' consultation enabled the development of an action plan to respond to the 120 demands expressed by the residents. In autumn 2021, RÉPONSES will return to the site to meet the residents of the 21 municipalities around the Etang de Berre, with a new phase based on collaborative work between the community and the project's stakeholders, in order to continue to improve the action plan and to consolidate and develop the tools for dialogue.



Since 2017, the Port of Marseille Fos has set up the Environmental Ship Index (ESI) awards, promoting the efforts of the World Port Climate Initiative (WPCI). This scheme rewards the ships of companies which achieve performances that go beyond the regulatory requirements. More specifically, shipping companies whose ships best contribute to air quality are honoured for their proactive efficiency and are rewarded with a reduction in port charges.



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SHIPPING COMPANIES REWARDED FOR THEIR AIR QUALITY EFFORTS IN 2020 (PORT CHARGES REBATE). ESI (ENVIRONMENT SHIP INDEX) AWARDS



MUNICIPALITIES INVOLVED IN THE REPONSES PROJECT



#### **Investing in a modal shift** to promote rail and river transport

Road, rail, river (as well as pipeline): all modes of transport are mutually complementary. By developing the Port's road access, such as the Fos-Salon bypass, which has been approved as an express road, modal shift is encouraged by connecting companies to rail and waterway services. Transporting the containers unloaded from ships by trains or river barges is a winning strategy for developing the massification of flows.

On the Rhone, this traffic is increasing thanks to a system of daily barges that relies on close coordination between the Port of Marseille Fos, the river operators of the Rhone-Saône axis, the handling agents and the shipping companies.

On the rail network, our partnership with the SNCF national rail network and our investments enable us to improve the performance of the Fos and Marseille terminals, Since 2008, the Port of Marseille Fos has invested more than 20 million euros into upgrading its rail facilities. The Port's rail network is served by 7 rail companies and 7 combined transport operators, with around 10,000 trains per year transiting the port.

The Port is continuing to invest in a modal shift, particularly for rail at Fos: more than €20 million will be invested over the next five years to build the rail hub at the Graveleau terminal, a direct rail link between the networks of tracks at the back of the two container terminals and the creation of a rail-road interface is planned for the new port services area (ZSP2).



Since 2018, thanks to the technical and operational support of the public and private players in the Port, a new daily rail service has been connecting the Perrier factory in Vergèze (Gard) to the Port of Marseille Fos. This initiative by the Nestlé Waters Group allows the delivery by rail of 13,500 containers per year, which means 27,000 fewer trucks on the roads.



+13,500

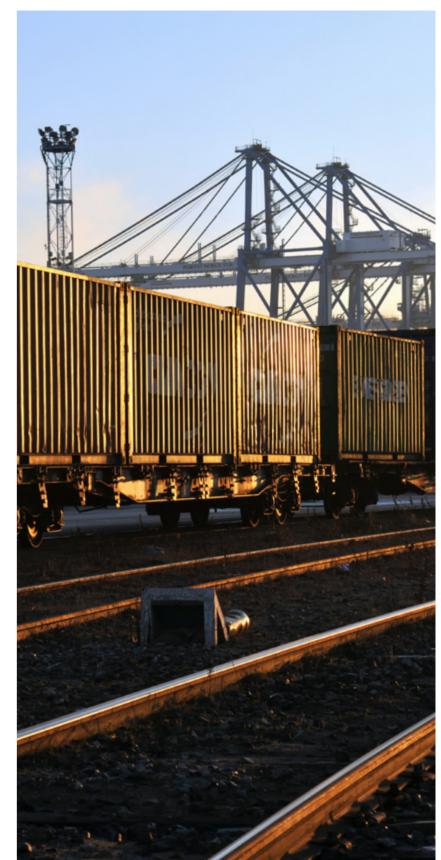
CONTAINERS PER YEAR VIA VERGÈZE - FOS

- 27,000

TRUCKS ON OUR ROADS FOR NESTLÉ WATERS



+10,000TRAINS PER YEAR TRAVELLING THROUGH THE PORT



#### Creating a vision of the axis and the southern façade

The axis in question is the one that links us to northern Europe, via the extension of the Rhône and the Saône. The façade refers to the Mediterranean shore on which we are located. By fulfilling its natural role as the southern gateway to Europe, Marseille Fos enables ships from all over the world to exchange goods with the whole of Europe. Using a maritime gateway to connect with the whole of the European market by mass transit ensures optimum distance, particularly for the areas located to the east of the Suez Canal, as well as greater efficiency, absence of congestion and reduced impact on the environment.

The Medlink Ports<sup>2</sup> association coordinates the operators along the Mediterranean-Rhône-Saône axis and develops the multimodal services of the port hubs, contributing to the concept of economic coordination that is being established along the façade.

#### AN ECO-CALCULATOR TO CHOOSE THE MOST **ECO-FRIENDLY ROUTE**

As part of the Smart Port Challenge, the Port and its partners each year invite start-ups and innovative companies to join forces with major groups operating in the metropolitan area (CMA CGM, EDF, Hammerson/les Terrasses du port, Interxion, La Méridionale, Naval Group, etc.) to take up challenges related to a sustainable vision of the port of the future. During the 1st edition in 2019, the start-up Searoutes took up the challenge "How to reduce greenhouse gas emissions from freight transport?" proposed by the Port. Searoutes created an eco-calculator which enables those involved in logistics to measure their carbon footprint and to choose the most environmentally friendly route.



#### and in the future?

#### DEVELOPING AN ATTRACTIVE ECOSYSTEM FOR THE GREEN TRANSITION, ATTRACTING AND SUPPORTING INVESTORS

Faced with the urgency of reducing greenhouse gas emissions and preserving the environment at a more local level, the Fos industrial port area intends to be an exemplary platform for innovation, whether it be to improve synergies between existing and future manufacturers in the context of a circular economy (Piicto platform), or to test new industrial prototypes (INNOVEX platform) with the aim of subsequently industrialising them on a larger scale.

Piicto currently has 38 members (manufacturers, local authorities, government departments, competitiveness clusters, etc.). The period 2020-2025 is a new phase for Piicto, with a new cycle of investments planned for the various industrial sites to accelerate their transformation and adaptation to current challenges (competitiveness and limiting the impact on the environment) and the inclusion on the platform of new players (developers of innovative projects, whether on an industrial scale or as demonstrators) that will create wealth for the region. In 2018, Piicto was able to attract the Chinese manufacturer Quechen, which is going to set up a production unit with a capacity of 90 KT/year of silica, intended for manufacturers of "green" tyres which help to reduce vehicle emissions.

#### PRODUCING GREEN AND COMPETITIVE ENERGY

The Port has the ambition and the potential to become fully involved in the renewable energy production process, from wind turbines to photovoltaic panels. To this end, the Port is working to forge partnerships to enable it to produce its own green energy, at a competitive price, for all its customers.

In 2020, feasibility studies were carried out for the development of a 9 MW photovoltaic units to be installed on the roofs of six port warehouses in Marseille's Eastern Docks.

Another photovoltaic project is under way in the Fos ZIP (Industrial Port Zone). This is the Port-Saint-Louis-du-Rhône dyke, which is being developed by the company Solarcentury - Oxygn (10 MW capacity). It is expected to quickly start contributing to the generation of renewable energy.

As part of the Provence Grand Large project, the Port of Marseille Fos is working with local stakeholders to develop the floating offshore wind sector through the first experimental farms, which will be followed by larger-scale industrial farms. The installation of the offshore wind farm 17 km off Napoleon beach, in the municipality of Port-Saint-Louis-du-Rhône, is planned from 2022.



#### **ELYSE TECHNOLOGY: FOCUS** ON ONE OF THE 18 COMPANIES **REPRESENTED ON PIICTO**

The company Elyse Technology, based on the Innovex platform, is developing an industrial demonstrator called "Combigreen". This project aims to recover energy from secondary raw materials through a new thermal treatment technology using pyrogasification which is designed - among other things - to produce carbon-free hydrogen. Combigreen is thus in keeping with the rationale of recovering co-products as defined across the Piicto platform.

#### **CREATING A HYDROGEN INDUSTRY**

The Port of Marseille Fos is maintaining and developing its traditional activities and finding new sources of growth to reduce its environmental footprint. It supports diversification and the energy transition in harmony with its surroundings whilst contributing to regional employment. The energy transition has thus become a new strategic activity for the Port. and hydrogen in particular offers great opportunities. Since 2015, the Port of Marseille Fos has been actively supporting the development of the hydrogen industry, notably by hosting the Jupiter 1000 demonstrator on its Innovex innovation incubator in Fos-sur-Mer. In 2016, it also supported the VALHYDATE project as part of the "H<sub>2</sub> in the territories" call for projects.

Numerous other collaborations deserve a mention, such as the organising of a special day on its premises in Fos at the end of 2015 on the theme of "H<sub>2</sub>, a resource full of energy for local development". It also contributed to the H<sub>2</sub> club led by the Cap Energies competitiveness cluster, the H<sub>2</sub> steering committee of the Regional Council and the hydrogen roadmap of the Aix-Marseille-Provence Metropolis. The Port has a number of assets available to establish itself as a development hub for all aspects of the sector: consumption, production, innovation and the import/ export of this energy, as well as its integration into industry and even the establishment of a market place. Among the many initiatives, one of the pioneers is the HyAMMED (Hydrogène à Aix-Marseille pour une Mobilité Ecologique et Durable) project. Launched in 2017, it aims to develop low-carbon hydrogen co-produced by the manufacturer Kem One in Fos-sur-Mer for use in heavy duty transport operations (cf.: page 08).

- 2- Medlink Ports: created in 2008 and constituted as an association since 2015, the Medlink Ports agency brings together the ports of Marseille Fos, Sète, Toulon and the 9 river ports of the Rhône Saône basin, Voies Navigables de France and the Compagnie Nationale du Rhône.
- 3- Power to gas: the JUPITER 1000 installation converts renewable electricity into gas for storage.



# TOGETHER WITH OUR PARTNERS, PROMOTING THE PORT'S INTEGRATION INTO ITS SURROUNDING AREA

Because the Port of Marseille Fos only serves its purpose in terms of its relationship with the surrounding area, the Port establishment is resolutely committed to dialogue and consultation with the those who represent the area, from a very local level to the whole of its vast hinterland. It's a well-known fact that the port has an international reputation thanks to local skills and to its catchment area.

#### Embracing the circular economy



1,200 ha

DEDICATED TO NEW INDUSTRY
AND THE CIRCULAR ECONOMY



### BIOLNG PRODUCED FROM HOUSEHOLD WASTE IN THE AIX-MARSEILLE PROVENCE METROPOLIS

A large-scale circular economy project is being led by EveRé, Elengy, TotalEnergies and the CMA CGM Group within the Port of Marseille Fos. The aim of this project, which is fully integrated into the local ecosystem, is to produce BioLNG, a liquefied biomethane, from the transformation of the biodegradable part of the region's household waste. This low-carbon alternative fuel will be used in particular for the CMA CGM group's liquefied natural gas-powered ships, thus reducing their carbon footprint.

Piicto is an innovation platform comprising more than 40 companies and institutions involved in the circular economy, including Vasco (algal biomass), Thassalia (geothermal energy) and River Cooling4 (natural cooling). Behind all these projects lies a very simple principle: the companies located in the Port produce energy or co-products that are reused to supply neighbouring companies. The Port encourages these synergies, which enable residual resources (unusable for lack of demand and storage) to be conserved whilst stimulating innovation and production. To support this approach, the Port has been a member of the National Institute for the Circular Economy since its creation in 2014.

4- River Cooling: natural cooling system (using water from a river) installed by Interxion, owner of three data centres in the Port.

#### The consultation continues

#### in the Western Docks

This is a story about stakeholders learning to listen to each other by sitting around the same table: in the Western Docks, the ongoing consultation process that has been under way for the past ten years has made it possible to listen to both those for whom the Port is a working resource and to local residents concerned about their living environment. Today, the ongoing consultation process brings together an informed and active network of over 450 people. The working groups include representatives of all the stakeholder groups in the Western Docks area: the business community, local authorities, non-profit organisations, employee representatives and government departments.

The initiative has nearly thirty subscribers to the Principles of Continuous Dialogue.



450
PEOPLE INVOLVED
IN THE ONGOING
CONSULTATION PROCESS



An example of the benefits arising from the work of the win-win projects associated with this ongoing consultation process, ZIP COM 06 0896 3354 is the toll-free number for the Fos industrial port zone (ZIP), providing real-time information on the ZIP.

A new strand of collaborative development is taking shape in the Fos ZIP with the "OAZIP 40" initiative led by the Port. The aim is to draw up planning guidelines for the industrial port area up to 2040, making it possible to reconcile economic development with the protection of environmental interests. In the same spirit, the Port establishment is going to implement an action plan for the mutualisation of transport in this business zone, which has nearly 7000 employees.

#### A City-Port dialogue under way in Marseille

Since the end of the 1990s, the Port and the City have found new synergies that blur the lines between these two entities. The signing of the City-Port Charter in 2013 by public institutions, partners, social organisations, business and port stakeholders, has enabled everyone to come together in search of synergies between port and urban spaces. As a result, it has been possible for projects such as Le Silo and the Terrasses du Port to emerge.

The City-Port Charter has laid down the fundamental principles of the combined development of the City and the Port, working in harmony and pursuing the objective of environmental excellence. Thanks to this close relationship, it has been possible to implement major projects in the port areas. Examples include the Mistral space in Estaque, the creation of the J4 esplanade, which were followed by the installation of the MUCEM and the Villa Méditerranée, and still to come is the J1, which is currently being redesigned.

The City-Port Dialogue is continuing the tradition of the Charter by involving local residents in the process. Launched at the end of 2019, the City-Port Dialogue is a response to the need for local residents to be informed and involved in port projects that affect their immediate environment. Following the phase 1 workshops in 2019, phase 2 is under way with new themes which will be the subject of a series of participative workshops and information meetings for the general public throughout 2021.

#### Anticipating, consulting, listening: new forms of consultation

Being part of the surrounding area also means learning to listen and consult. As we develop new areas, such as the "Cap Janet" international terminal or the "ZSP2" Port Services Zone, we are taking the time to invest in prior investigation and consultation.

#### **INNOVATIVE SOLUTIONS** TO TACKLE AIR POLLUTION IN THE METROPOLIS: **DIAMS PROJECT**

The Port is involved with the Aix Marseille Provence Chamber of Commerce and Industry and Aix Marseille University in the Diams (digital alliance for Aix Marseille sustainability) programme supported by the Metropolis and Atmosud. This European programme aims to launch a platform for the exchange of air quality data and digital services for citizens in the metropolitan area, developed with partners such as the Aix Marseille Provence Metropolis, Atmosud, Avitem, A Lab in the Air, thecamp, Matrice, La Poste, L'Air et Moi, Aria technologies and Ecologicsense - tera group. Diams offers the metropolitan area the opportunity to experiment with new ways of understanding air quality while developing innovative solutions.



#### Projects with and for the economic players in the surrounding area

ArcelorMittal and the Port are studying a partnership on the use of alternative materials to combine the challenges of development and the circular economy.

A concrete example is the start of a project at the Lavera oil terminal (Fluxel): to improve the safety and security of the area (through the construction of sea walls), steel making slag is delivered as a substitute for natural resources, representing a total volume of up to 12,000 tonnes. This is the first use of steelworks slag in the Port. Arcelor's range of slags also includes crystallised slag and ground slag from blast furnaces. ArcelorMittal's co-products can be used for all the construction components of a project (earthworks, pavements, construction).

Also at Fos sur Distriport, a logistics zone to the west of the Port, nearly 200,000 m<sup>3</sup> of excavated earth from the Nice tramway construction site was transferred to Fos in order to prepare the land prior to its sale. The recycling and trading of building materials is a rapidly expanding activity, particularly in the designated sector of the Port's Dock 1.

#### Numerous partnerships with local authorities, operators and financial backers

ADEME, European Investment Bank, Metropolis, Departmental Council, Regional Council, Europe - Feder... the list of our public partners and investors is long. At the local level, the signing of the City-Port Charter in 2013 has enabled all the partners to work together to find synergies between port and urban spaces.

#### A commitment to youth employment with Cap au Nord entreprendre

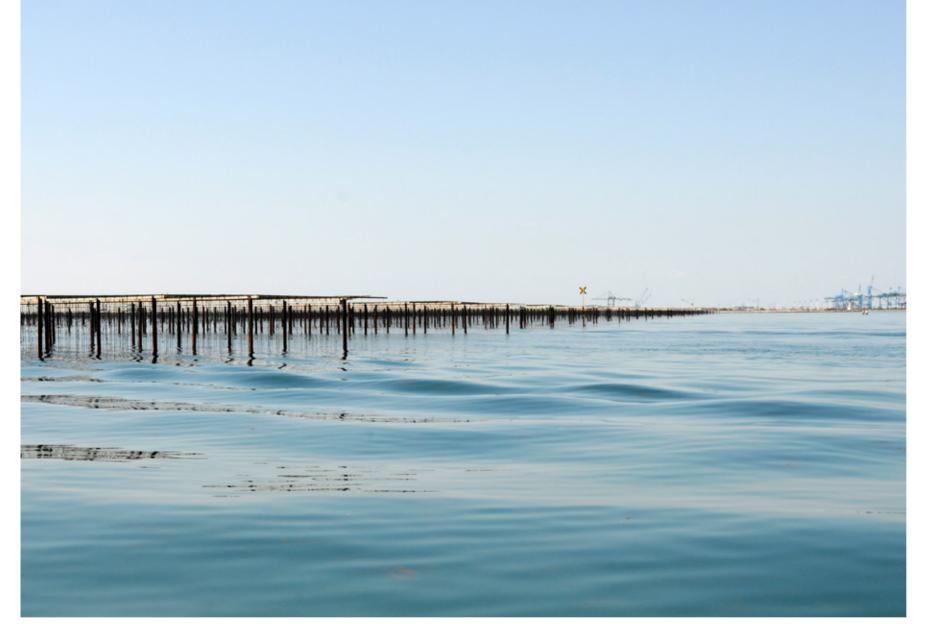
The Port of Marseille Fos has been a member of the Cap au Nord entreprendre network since 2018. Together, they organised a visit for nearly a hundred young people: secondary school students, E2C, Epide, École Centrale de Marseille and the Pilotine Association, who came to find out about the Marseille Fos port training institute and visit the Marseille Docks as well as the Marseille Shipyard and Monaco Marine. It was an opportunity to introduce these young people with different backgrounds and perspectives to the diversity of port professions, whose activity generates wealth, employment and a future in harmony with the environment. As part of the 3rd Smartport Challenge, the Port of Marseille Fos and the Union Maritime et Fluviale de Marseille Fos (UMF) are co-innovating with the company WIXAR to offer training opportunities and associated jobs to future students, with the help of highly innovative tools (networking platform, coupled with virtual reality).

and in the future?

#### IMPLEMENTING A POLICY OF DEVELOPING LAND AND **REAL ESTATE ASSETS**

Sustainable development issues are now incorporated into the planning and pre-development phase of a new site project. This means that the harmonisation of approaches to avoid and reduce impacts is at the heart of our land and property strategy. It also enhances the attractiveness of the area, allowing us to respond more effectively to the needs of the various sectors, which we also identify through our cooperation with Provence Promotion<sup>5</sup>.

<sup>5-</sup> Provence Promotion: Economic development agency of the Aix-Marseille Provence Metropolis affiliated to the Marseille Provence Chamber of Commerce and Industry.



## THE PORT IS WORKING TO PROMOTE BIODIVERSITY AND PROTECT THE WATERS AND THE COASTLINE

One third of the territory of the Port of Marseille Fos is made up of natural spaces. Between the Camargue, the Crau and the Mediterranean, port teams manage exceptionally rich biodiversity reserves. In line with this preservation of land areas, the Port of Marseille Fos is also a proactive player in the protection of the sea and the coastline.

#### A port that cares for the fauna and flora which it manages

#### MANAGEMENT PLAN FOR NATURAL SPACES

By virtue of the responsibilities assigned to it by the Transport Code, the Port undertakes the management and preservation of the natural public heritage and natural spaces that it owns or that are assigned to it. Accordingly, Marseille Fos has for many years been committed to a strong and proactive approach to environmental protection and the preservation of outstanding natural spaces. This task is carried out on a daily basis by a team of three eco-guards and an ecologist.

A Management Plan for Natural Spaces has been in place since 2007 for an area of nearly 3,000 hectares, a space that is currently excluded from any commercial development. The natural areas of the Green Belt are very diverse and many natural habitats have been identified, such as the Coussouls de la Crau, dune landscapes, and numerous wetlands: marshes, reed beds, salt meadows, salt marshes and former salt flats. This protected area is rich in more than 400 plant species and 300 animal species, some of which are protected.

These are some of the practical initiatives that are currently under way:

- the MédiCyn project, which involves the restoration of temporary ponds in areas of marsh and salt meadows whose use is shared with activities linked to hunting and pastoralism;
- restoration of an oak woodland as part of IKEA's compensatory measures;
- the closure of access to the Ventillon sector for motor vehicles;
- the enhancement of the built heritage with the restoration of the Bergerie de la Favouillane, a true showcase of pastoralism within the green belt:
- the construction of a permanent enclosure for the nesting of the little tern on the Gracieuse sand spit;
- a clearance plan to better manage the risk of fire on the marshes, to rejuvenate the environment and to encourage the return of certain species has just been put in place;
- the grassing over of land in the Oiseau sector (cf.: page 30).



#### 3,000 HA

THIS IS THE SURFACE AREA OF THE AGRI-ENVIRONMENTAL BELT IN FOS, AN AREA MANAGED ON A DAILY BASIS BY A TEAM OF PORT ECO-GUARDS AND WHICH IS THE SUBJECT OF A FIVE-YEAR MANAGEMENT PLAN.



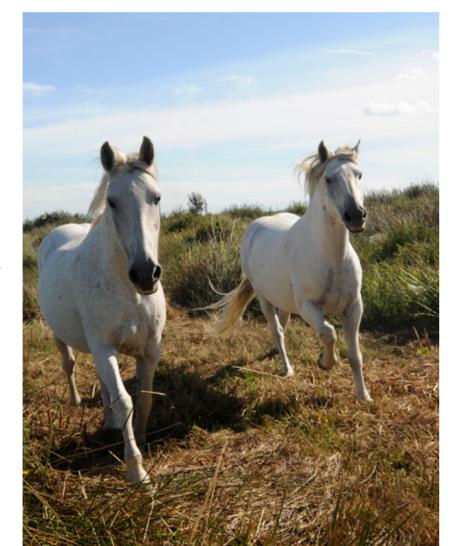
#### **PRESERVATION** AND ENHANCEMENT **OF OUTSTANDING HERITAGE**

The La Favouillane sheepfold, located in a protected area of the Fos ZIP, will be restored in 2021. The safeguarding of this building with its reed thatched roof has mobilised numerous actors alongside the Port for several years. Thanks to this collective effort and the financial support of the local authorities the Port of Marseille Fos is committed to carrying out restoration work on this building (nearly €400,000 promised).

#### REDUCING ENVIRONMENTAL IMPACT

The Port endeavours to take into account the challenges of sustainable development in all its areas of competence: hosting ships, development, management of port and industrial zones. It is also involved in action plans to reduce the environmental impact of the Port's traffic and operations in areas such as waste management and the protection of sea water quality. It strives to promote this sustainable development approach to its users and industrial occupants, particularly in terms of energy consumption.

For several years, the Port has been implementing a plan for the collection and treatment of ship waste in accordance with the requirements of Directive 2000/59/EC. The Port's 2018 - 2021 waste plan has imposed a reduction in the thresholds limiting the storage of waste on board ships leaving Marseille Fos. The Port's reporting system now provides an alert for each port call to anticipate the ship's waste situation, a service appreciated by the Port's customers.



#### **Biodiversity** and regulatory competitiveness

The experiment of regulatory competitiveness in the industrial-port area (ZIP), as requested by the Prime Minister as part of the Inter-ministerial Committee for the Sea of November 2017, is based in particular on anticipated fauna/flora inventories, which will be made available for carrying out the "Avoid/Reduce/Offset" procedure in the best possible manner. This will facilitate the establishment of new industrial activities, while retaining the same requirement towards the environment. Ideally, the fauna/flora inventories will not only provide an inventory of the current situation, but also of the dynamics of the environment, which would make it possible to extend the validity of these inventories beyond the usual validity period, i.e. five years instead of three, in close cooperation with the State services at local and central government level.

#### **Integrated management** of the waters

and coastline

Development of partnership initiatives, particularly in the framework of environmental contracts (Metropolis bay contract, Crau groundwater contract, Camargue delta contract).

- Management of the Crau aquifer With the signing of the groundwater contract, led by the SYMCRAU (joint union for the management of the Crau groundwater table), a partnership approach has been adopted to enable the global, sustainable and coordinated management of the Crau groundwater table. This underground water resource is a fragile environment that is affected by agriculture, since the water from the Durance flows into the industrial port area of Fos through the irrigation of the Crau grasslands.
- Metropolis Bay Contract The Marseille Metropolis Bay Contract was signed in the autumn of 2015 by the Port as well as by numerous institutional and industry stakeholders. Concluded for a period of 6 years, with an overall budget of 265 million euros, the objective of this contract is to preserve, improve and develop 130 km of coastline. The contract covers the coastline from Martigues to Saint-Cyr-sur-Mer, including the natural watershed of the Huveaune and most of the Aygalades watershed.

Through a call for projects launched jointly by the Port of Marseille Fos and the Regional Chamber of Agriculture, 500 hectares of the agri-environmental belt of the Fos industrial port zone were able to be put back to pasture in August 2018. The operation enabled two young farmers to access the natural spaces in the Oiseau - Enfores sector in order to breed Camargue horses and bulls.

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and in the future?

#### DRAWING UP A NATURAL HERITAGE MASTER PLAN

The Natural Heritage Master Plan (or SDPN) is a document to help take into account the natural environment and biodiversity in the port area. It involves assessing and anticipating the impacts linked to economic development and creates an ecological coherence between the current management of natural spaces and the issues identified in the development zone. The assessment, spatial planning (corridors, reservoirs and reserves of natural resources) and the action and investment plan will make it possible to improve the coherence, quality and timing of the "Avoid /Reduce/Offset" process. The exhaustive compiling of ecological data will facilitate the planning of future projects and help to improve the regulatory competitiveness of the ZIP (cf.: Biodiversity and regulatory competitiveness).

#### TAKING STEPS TO BECOME A BIODIVERSITY OFFSET OPERATOR

Currently, when development projects require offsetting to develop biodiversity on other natural sites, this offsetting is carried out outside the Port's territory. Drawing on its experience as a manager of natural spaces acquired over the years and enshrined in the port reform law, the Port of Marseille Fos assists investors in finding and implementing solutions that guarantee respect for the biodiversity which exists when they set up operations. IKEA, Maisons du Monde and IDEC have benefited from this support from the Port's teams in the search for and implementation of solutions that have made it possible to limit the loss of biodiversity despite the destruction resulting from construction. Among the many actions carried out to promote biodiversity, the highlights include the acquisition of natural spaces that were then entrusted to managers, the rescue of impacted species, scientific studies to improve ecological awareness and conservation actions (for example, the closure to vehicle traffic of the Coussoul du Ventillon sector, a very rare arid steppe that is home to many protected species).



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