Designing solutions for a positive life

# essentials **2024**







#### Designing solutions for a positive life



Consulting Master planning & feasibility **Design & engineering Construction & project management** Asset & facility management **Turnkey solutions** 





## 5 EDIORIAL

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Proud to have assisted the Paris Metropolis to welcome THE 2024 OLYMPIC GAMES

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**Mobility** Water Energy **Buildings** Industry



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## 

Chief Executive Officer

## Reaching our targets a year ahead of schedule!

The Artelia Group's strategic plan, 'Horizon 2025', which was drawn up five years ago, set out a global ambition and framework in terms of growth, international development, affirming our CSR commitments and stepping up research and innovation. As we enter 2025, I'm delighted to announce that, thanks to the efforts of all the teams involved, we have achieved the objectives we set ourselves. A year ahead of schedule!

Buoyed by this strong growth dynamic, Artelia now ranks in the top 10 in Europe and among the top 30 to 40 engineering companies worldwide. The symbolic milestone of one billion euros in turnover, half of which outside France, was reached in 2024, by relying on external growth and sustained organic growth in all our areas of activity. A cornerstone that testifies to the Group's solidity. The selection of projects that you will discover in the following pages shows the rich diversity of our contributions to the major challenges of urban and regional development, worldwide. We are also proud to have contributed to the success of a major global event in 2024, the Paris Olympic Games.

Artelia is also about to reach the significant milestone of 10,000 employees, in more than 40 countries on 5 continents, by welcoming several companies that reinforce its momentum of organic growth. In 2024, we strengthened our presence in the UK with the acquisition of Pick Everard and Castons, two long-standing players in the construction consultancy sector. We have reinforced our expertise in building security with MTC, and in airports with the teams at Aéroports de Paris Ingénierie (ADPI), making us one of the leading players in this sector, which requires niche expertise. Now known as Artelia Airports, this entity also strengthens our presence in the Middle East and South-East Asia, another excellent new asset.

In 2024, we also fulfilled several of our commitments in terms of environmental impact, scientific culture, digital transition and quality of life at work. Our internal commitment survey shows that 82% of our employees recommend Artelia as an employer.

Validated since 2023 by the SBTi, our ambitious programme to reduce our carbon footprint is speeding up its implementation. We have also finalised the development of 'TRACE by Artelia', which combines a method and a digital tool for the eco-design of projects. This is further tangible evidence of our commitment to helping all our customers move forward on their own sustainability trajectory. The ecological transition also continues to be the common thread running through our rapidly expanding research and innovation work. It is our duty to propose innovative solutions to the major challenges of mitigating and adapting to climate change, saving resources and preserving biodiversity. Our foundation is also involved in environmental initiatives, in addition to its traditional humanitarian and social missions

The digital transition is the other priority on which many of our investment efforts are focused. Our WizArt customer platform is now fully operational, offering personalised project and data management services. At the same time, we have invested in the creation of the AugmentIA chair, with the aim of putting artificial intelligence - a strategic subject indeed - at the service of engineering, planning and construction, while adopting an ethical and environmental approach.

These impressive results, achieved in 2024 in a turbulent and uncertain global economic and geopolitical context, are a well-deserved reward for the commitment of all the Group's teams. They also provide strong motivation to continue in 2025, in an economic climate that is bound to remain volatile. We have shown that we are dynamic, adaptable and resilient, and we will continue to do so with optimism and determination in the years to come, because at Artelia, taking on ambitious challenges is in our nature. The new 2030 strategic plan, which involves several hundred employees in its preparation, will be precisely the common compass that will guide us as we continue to embody and serve our raison d'être: 'Designing solutions for a positive life'

Enjoy your reading!

## **A STRONG EUROPEAN PRESENCE**

With the acquisition of Pick Everard and Castons, Artelia accelerates its development in the UK, where it has been operating for over 20 years. The Group now employs almost 1,000 people in the country, consolidating its leading foothold in Europe. It is drawing on its longstanding presence in Africa and the Middle East and is continuing to develop in Asia and North America. Artelia also strengthens some of its activities, including airports and security, with the acquisition of the French companies ADPI (now Artelia Airports) and MTC.

#### PICK EVERARD AND CASTONS JOIN ARTELIA IN THE UK

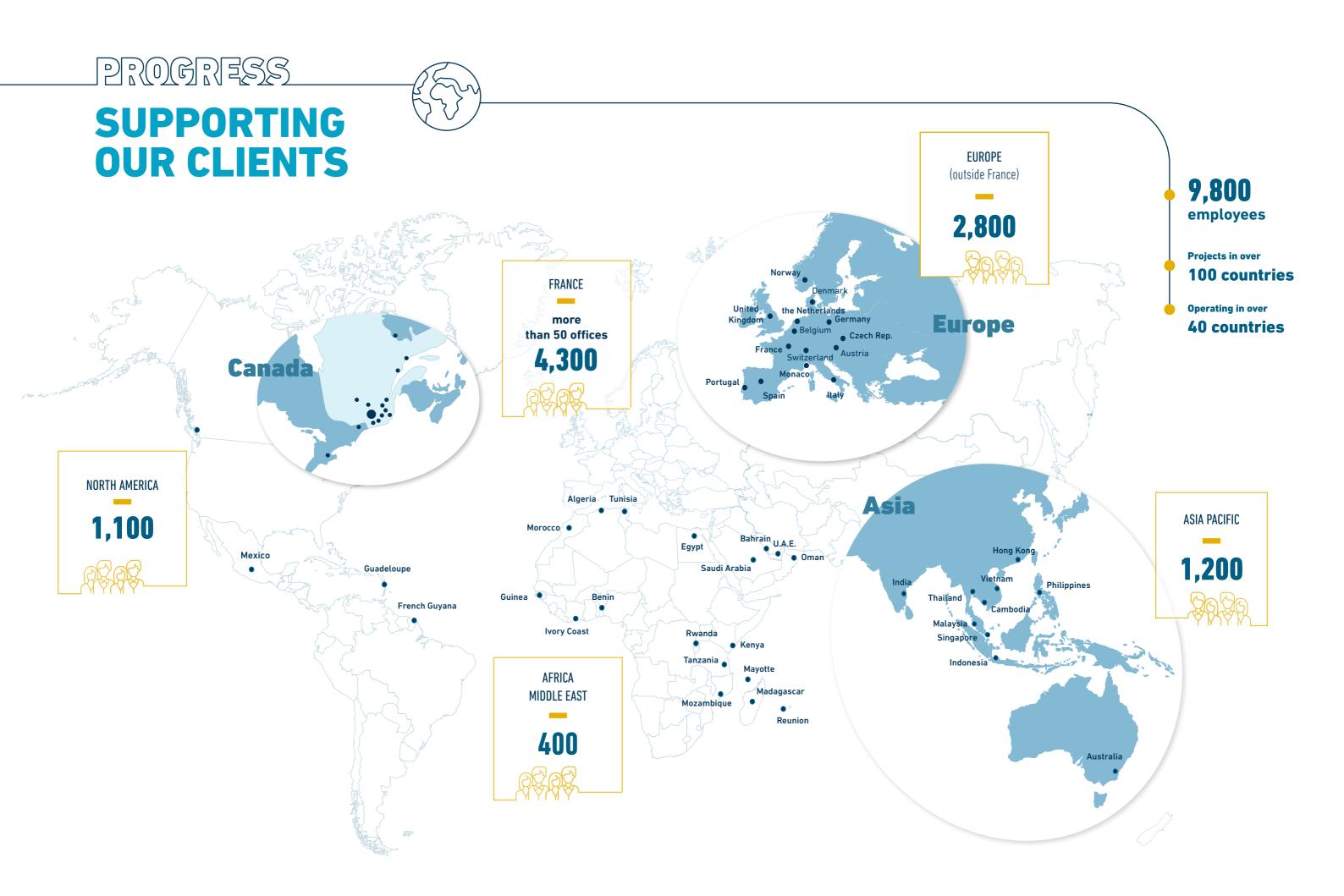
Artelia Airports, formerly ADPI (Aéroports For over 150 years, Pick Everard (700 employees) de Paris ingénierie) supports its clients at has been one of the UK's leading consultancy every stage of their airport infrastructure firms. With its head office in Leicester and 13 projects (terminals, runways, baggage regional offices, it has a strong local presence. sorters, etc.), from consulting to design Its multi-disciplinary teams provide a full range and project management. The company of design and project management services in employs around one hundred experts, the building and infrastructure sectors. As a mainly based in the Middle East and Asiashareholder of Perfect Circle, Pick Everard is Pacific. It strengthens the Group's existing appointed to Scape's Consultancy Services and competencies in France and Denmark, Utilities Frameworks, providing efficient and positioning it as a global player in the flexible procurement solutions across the public redevelopment of airports, particularly and utilities sectors particularly in justice, health, in respect of environmental and education, defence, energy, etc. decarbonization issues.

Founded in 1895 and established in Ipswich, Castons (approx. 70 employees) is highly experienced in cost management, building surveying, construction health & safety and principal designer services in the East of the UK. The company operates in a wide range of sectors (laboratories, offices, university facilities) and is involved in major projects for NHS Trusts.



#### NEW AIRPORT AND BUILDING SAFETY EXPERTISES

Founded in 1966, MTC is a technical engineering firm that provides its clients with multidisciplinary consulting and general building engineering services. MTC has specific international expertise in the design of safety equipment for sensitive buildings, supporting project owners in meeting their requirements and the specific constraints of their sites.







## **INTENSE RESEARCH AND INNOVATION ACTIVITY**

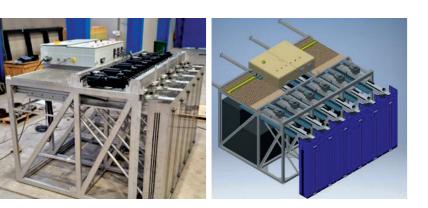
Focusing on rainwater infiltration, extending the life of asset, implementing circularity and reuse, linking urban heating networks and industrial needs... Artelia is committed, both with expertise and determination, to developing innovative solutions in favor of the ecological transition.

#### MANY OF OUR CLIENTS ADOPT MÉTHOD'O FOR LONG-TERM **STORMWATER MANAGEMENT**

On June 14, 2024, Guillaume Barjot presented his thesis on the adaptation of a score mapping method for the integrated assessment of runoff areas in urban environments. This highly innovative method combines consultation and simulations to co-organize water management that optimizes infiltration, contributing to a new environmental and resilient urbanism. Finalized as part of the Greater Reims Rain Plan, Méthod'o and its modeling tools have been adopted by other local authorities (Metz Eurometropole, Béziers, Estérel Côte d'Azur and Saint-Brieuc Armor urban communities) to map the catchment area's capacity to manage stormwater at its source and the capacities for restoration of soil permeability.

#### **NEW THESIS LAUNCHED ON SEDIMENT TRANSPORT**

As sponsor of the Oxalia industrial chair, Artelia is co-supervising Maxime Kaczmarek's thesis on the dynamics of the "swash zone", the space between land and sea where waves end their course. The specific physical mechanisms that take place on a small scale in this turbulent zone are decisive in the morphological evolution of coastlines, but very difficult to model. Using both experimental and numerical approaches, this thesis aims to enhance our knowledge of the issue.



#### **The Hydraulics Laboratory** is modernising

Artelia is investing in a new, latest-generation multidirectional wave generator to enhance its ability to simulate waves caused by extreme climatic phenomena in areas of greater depth. The new equipment, both electrical and modular, will enable us to expand our range of services (floating structures, etc.) Commissioning is expected in April 2025!



During the Grenoble team's moving to new offices, two Artelia employees designed and implemented tools and processes to maximize the re-use of furniture and materials from the disused building. Over 2,000 items of furniture (out of 3,200) were recovered by employees and associations. Over thirty different kinds of materials were also reused by a local circular economy network.

Together, this represents a saving of 208 t eqCO<sub>2</sub>, or 118 round-trips between Paris and New York by plane. By imagining reuse in several phases, by adapting all the tools needed to organize removal and deconstruction, and by inventing the necessary process chains, this innovative approach helps to meet the major challenge of saving resources, to which Artelia has been committed for several vears.



#### **Connected bridges: securing** structures and prolonging their life

Supported by Cerema (the French center of expertise in sustainable regional development), the Connected Bridges call for projects aimed to offer local authorities economical, practical and high-performance solutions for monitoring and maintaining their infrastructures. As pilot of the Cahpreex and Survout projects. Artelia participated in the development and testing of a low-cost, high-potential bridge instrumentation prototype. Using a system of water and strain sensors, it monitors cable corrosion in prestressed or cablestayed structures. This damage, which is difficult to detect by non-destructive inspection, can cause the destruction of a structure, as shown by recent events. Experimentation on the Sylans viaduct has demonstrated the value of this prototype, and the necessary adjustments to be made to the sensors and antennae to enhance its performance.



#### **BETTER INTEGRATING INDUSTRIAL PROCESSES INTO DISTRICT HEATING NETWORKS IN DENMARK**

Artelia is involved in the project named RAPIDH (Renewable and Affordable Process-Integrated District Heating). Financed by the EUDP (Danish programme dedicated to reducing carbon emissions), its objective is to reduce CO<sub>2</sub> emissions of the Danish process industry by 15% up to 2030, by integrating district heating as part of a technically and economically feasible energy-solution mix. The project partners will develop operational simulations to map out opportunities for various process industries to optimize their energy use and assess the resulting impact.



## PROGRESS **ARTELIA DIGITAL SOLUTIONS** Driving the Group's digital transition

Offering a range of customized services to support the digital transition of the Group's clients, ADS (Artelia Digital Solutions) strengthened the WizArt client platform and launched new specialised software.

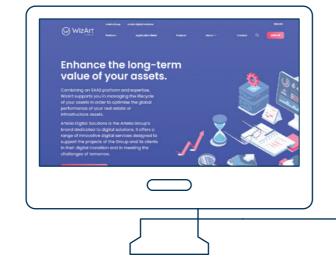
At the same time, it has been pursuing its usual activities, such as the design, implementation and maintenance of information systems, and is playing a key role in high value-added initiatives. The main ones include cybersecurity, digital twins, virtual reality and artificial intelligence.

#### WIZART CLIENT PORTAL FULLY **OPERATIONAL**

After four years of development and enhancement, the WizArt Client Portal has reached maturity. Fluid and user-friendly, this modular project management platform provides users with a dynamic restitution of their data through reports, dashboards and mapping, while offering specific business applications. Secure and easy to access. facilitating interaction, it is highly appreciated by those who need to comply with a formal project monitoring process, involving multiple sites, players, assignments and reporting levels.

Already adopted by a number of clients such as Shell UK and Volkswagen Retail France, the WizArt platform now welcomes Engie among its users, with almost 250 employees involved in optimizing the management of monitoring campaigns and the analysis of data from dams and embankments.







#### LAUCHING OF QAAD AND **DEPLOYMENT OF SIMILLAR**

Software provider specializing in the engineering and construction sectors, ADS launches QAAD, an automated quality assistant that harmonizes and optimizes the production of AutoCAD® drawings. Simillar, meanwhile, is expanding worldwide. This immersion worksite simulation software has already convinced more than 150 agencies and construction companies in France.

Digital Solutions



#### FOUNDATION OF THE AUGMENTIA CHAIR. bringing artificial intelligence to engineering, planning and construction

Resulting from a strategic partnership between the Grenoble INP Foundation and the Artelia Group, this chair will contribute to the operational implementation of AI within our businesses, adopting an ethical and responsible approach. Several topics of research and innovation are considered, such as the adaptation of generative AI and large language models to the specific needs of engineering, the reduction of energy consumption and the carbon impact of current models, the positioning of human beings and human values in this new technological environment...

#### ARTELIA Consulting continues its development in the ecological transition

Artelia Consulting is continuing to assist funds and lenders in their investment operations in various sectors (energy, mobility, culture, social, infrastructure, etc.). As technical advisor, it supported international lenders on the project led by the Centre Pompidou and the Musée Picasso to build a centre for conservation and creation called the Fabrique de l'Art in Massy, near Paris, as well as in the refinancing of facilities to produce biomethane from landfill gas.

It has also enhanced its offer to meet the growing needs of private and public clients in terms of ecological transition. Aimed at companies, public organizations and financial players, this new offer meets a wide range of needs: regulatory framework, implementation of action plans, definition of CSR strategies, decarbonization, adaptation to climate change, preservation of biodiversity, etc. We carried out a market study for an oil company looking to invest in a diversification of its activities into solar energy. We were also commissioned by the Provence-Alpes-Côte d'Azur region as part of its partnership with Morocco. Our assignment was to assess the contribution of "local energy-climate services" to the green economy, and to make recommendations for their sustainability in the Mediterranean.





Shaping the design and implementation of projects to improve their environmental and social footprint, while preserving natural resources, reflects our ambition to "design solutions for a positive life". In response to climate change, declining biodiversity, water and resource shortages, TRACE is our contribution as an environmentally responsible engineering company.

Our offer consists in providing a rational framework for collaboration with the client and its relevant partners throughout the project, in favor of the best solution. We have developed TRACE by Artelia, to emphasize our commitment to a strong and clear approach to help our clients align their projects with national and international objectives to contribute to the ecological transition and preserve the planet for future generations.

#### A CO-CONSTRUCTION APPROACH INITIATED AT THE VERY BEGINNING OF PROJECTS

One of TRACE's strengths is that it can be applied from the start of a project, in order to maximize impact avoidance. Our teams initiate the process by drawing up the site's environmental and social footprint, then define the project's ambitions with the project owner, based on universal criteria applicable in all countries. This process then leads to the identification of opportunities which, when expressed in terms of quantified objectives, generate an initial eco-design specification. This will then be challenged at every stage of the project's life, as part of a continuous improvement and collaborative approach.

#### **19 INDICATORS TO COVER ALL ASPECTS**

TRACE combines 19 quantitative measures grouped into 6 main categories: carbon, pollution, biodiversity, society, living environments and risks. Its scoring grid covers a wide range of topics, such as energy, waste management, social acceptability, technological risks, habitat preservation, materials savings, etc. The mobilization of all the Group's activities around this new approach makes it extremely strong and efficient.

#### A SINGLE AND MULTI-SITE DIGITAL REPORTING **AND MANAGEMENT TOOL**

The dedicated software application enables to track the evolution of the initial impact profile at any time, and measure the progress made, whether for a single site or a multi-site approach. Available on Wizart, the Artelia Group's digital platform, it combines all the facilities of this platform in terms of accessibility and sharing, user-friendliness and security.

## **ASSERTING OURSELVES AS A REFERENCE IN CSR**



#### **IMPLEMENTATION OF THE SBTI PROGRAMME**

Artelia is committed to reducing its absolute GHG emissions by 46.2% for 'scope 1 and 2' and 27.5% for 'scope 3' by 2030. To meet these commitments, we have launched a wide range of initiatives.

In France, a network of 40 climate referents has been set up to support an awareness-raising and training campaign for around 4,000 employees. Structural measures have been taken to improve the transport carbon footprint. The systematic replacement of company vehicles with electric vehicle has been initiated. In addition, the new car policy now offers 100% hybrid or electric vehicle. The Group will also be providing its employees with high-quality electric bicycles at very attractive prices to encourage the use of active modes of transport.

Other actions have been undertaken on a country-bycountry basis, particularly in the largest subsidiaries with the highest GHG emissions. Canada, Denmark, Italy, Norway, the United Kingdom and Vietnam have all worked on a guantified action plan (in € and CO.) to determine the priority actions to be launched in order to achieve the 2030 targets.



#### **AWARDED GOLD STATUS BY ECOVADIS**

As we do every year, we had our CSR performance assessed by EcoVadis, a rating organisation that works with over 150,000 companies in 185 countries, analysing four areas: environment, labour & human rights, ethics and sustainable procurement. We obtained a score of 77/100, ranking us in the top 2% of our sector's companies assessed by EcoVadis.



#### **RENEWAL OF OUR COMMITMENT TO THE UNITED** NATIONS GLOBAL COMPACT

We have reaffirmed our commitment to the United Nations Global Compact, renewing our commitment to respect ten universal principles (human rights, labour law, environment, anti-corruption) and to implement 17 Sustainable Development Goals (SDGs). As part of this commitment, we publish our annual Communication on Progress (COP) on the Global Compact website.

Artelia has always been committed to being exemplary in terms of environmental and social responsibility and has made year-on-year progress in implementing its CSR policy, anticipating the increasingly demanding requirements of regulations and labels. Major efforts have been devoted to launching the decarbonisation programme validated by the SBTi and to rolling out the ISO 14001 environmental standard within the Group. For the first time, we also had our cybersecurity strategy assessed by an independent organisation, as we have been doing for several years for CSR.



#### **DEPLOYING ENVIRONMENTAL MANAGEMENT AND ISO 14001 CERTIFICATION**

The environment is a core, cross-functional issue for Artelia in many ways, making it one of the pillars of its CSR policy. The systematic deployment of high-quality environmental management at each of our sites is therefore one of our priorities. A rationalisation and standardisation of our approaches in this area have been initiated to offer best practices everywhere. Several of our sites in France, Dubai, Spain and the UK are already ISO 14001 certified, representing 37% of the Group's employees. Our aim is to increase this ratio to 50% by the end of 2025.

#### cybervadis

#### A FIRST CYBERVADIS ASSESSMENT

Given the importance of digital data and cyber attacks, Artelia had its cybersecurity system assessed by the independent organisation CyberVadis, which offers a comprehensive audit of this category of risk. We obtained an overall score of 811/1000, with results well above the average of the companies audited in the four main areas of analysis (confidentiality, data protection, maintenance in operational condition, third-party risk management). This overall score places Artelia among the 'developed' companies in terms of cybersecurity.

#### **PROTECT OUR ENVIRONMENT**

#### **OUR COMMITMENTS**

- Align Artelia Group's carbon footprint with the objectives of the Paris Agreement through our commitment to the Science-Based Targets Initiative (SBTI)
- Contribute actively to reflections on reducing the carbon emissions of our customers' projects
- · Prompt our customers to commit to an ecodesign approach to projects and eco-monitoring of sites integrating biodiversity aspects



#### **DEVELOP OUR HUMAN CAPITAL**

#### **OUR COMMITMENTS**

- Embrace a "zero accident goal" safety culture
- Foster the commitment and well-being of our staff members
- Promote women empowerment within the company
- Accelerate inclusiveness
- Enable stimulating career paths

#### ENSURE RESPONSIBLE GOVERNANCE

PROGRESS

**FOR 2025** 

**OUR ESG OBJECTIVES** 

OUR COMMITMENTS	OUR TARGETS
<ul> <li>Assert ourselves as a pioneer engineering company in CSR</li> <li>Remain exemplary in ethical matters</li> <li>Motivate employees by sharing the financial performance created</li> <li>Preserve our independence by increasing the number of employees becoming shareholders</li> </ul>	<ul> <li>Carry out a detailed assessment of ESG risks and opportunities on 100% of our significant offers by the European taxonomy and the SDGs</li> <li>Train 100% of our employees and freelancers year ethical risks</li> <li>Integrate ESG clauses in 100% of our purchase of and carry out yearly targeted audits</li> <li>Share at least one-third of the profit generated by operational activity</li> <li>Promote employee shareholding to at least 50% of employees</li> <li>Encourage employee shareholding among young</li> </ul>

part of defining the Group's 2030 strategy.

#### **OUR COMMITMENTS**

- Contribute to the appeal of scientific professions
- Encourage women to join engineering professions
- · Commit to the common good through the Artelia Foundation



Artelia's CSR policy is based on 4 main pillars and 20 targets that reflect

the Group's high ambitions in terms of ESG criteria (environment, social,

governance). A detailed assessment of the results reached by the end of

A process has been launched to adjust and renew these objectives as

2024 is published in the extra-financial performance report.

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- with an initial objective of at least 50% shareholders under the age of 45



#### **OUR TARGETS**

- Reduce the carbon footprint of our direct emissions (facilities and vehicle consumption) to meet the "1.5°C" trajectory (scope 1 and 2 in absolute value and intensity per employee)
- Reduce the carbon footprint of our indirect emissions (mainly travel) to respect the "well below 2°C" trajectory (scope 3, in absolute value)
- of our project managers in methods and tools dedicated to sustainable design / monitoring of projects
- Promote a sustainable design / monitoring approach on

#### **OUR TARGETS**

- Achieve a workplace accident frequency rate of less than 3.25 and aim for zero serious accidents
- being" indicators in the annual employee survey
- Make 100% of our employees aware of the "Each&All" Diversity and Inclusion approach every year
- Enable 100% of our employees to access presence-based o digital training each year
- Co-build new professional opportunities for each emp at least every three to five years



#### **CONTRIBUTE TO DEVELOPMENT AND SOCIAL PROGRESS**

#### **OUR TARGETS**

- Support 15 research programs through doctoral actions or
- Participate in five programs aimed at promoting engineering professions among women
- Achieve 500 annual days of missions for volunteering
- Target an annual investment of at least 3% of the Group's operating income into the foundation

## Proud to have assisted the Paris Metropolis to welcome **THE 2024 OLYMPIC GAMES**

Involved in some twenty framework agreements and development projects directly related to the Olympic Games, including an operational management assignment for Solideo (A public authority for the delivery of the Olympic structures), but also, on a larger timescale, in the urban renewal and improvement of the city's transport infrastructure, we are delighted to have contributed to the success of this planetary event.

#### **BUILT BENEATH PARIS'S SOUTH-EAST DISTRICT**

This monumental underground reservoir is able to store 46,000 m<sup>3</sup> of wastewater and stormwater. Our teams were in charge of the design and supervision of this project, which contributes to the City of Paris' bathing program.



This modern aquatic center is more than 50% powered by renewable energy. After welcoming water polo delegations, it is now open to the public.

## NATURAL BATHING SITES $\sim$ in the seine

Our teams provided technical and regulatory assistance for the feasibility study and construction of several natural bathing sites in the Seine.

#### DESIGN AND SUPERVISION OF THE PIERRE LAROUSSE FOOTBRIDGE IN AUBERVILLIERS

Providing easy access to the Stade de France and the Olympic Aquatic Center during the Games, it now offers cyclists and pedestrians a new passageway over the Saint-Denis Canal, contributing to the improvement of soft mobility in the Seine-Saint-Denis district.



#### DESIGN AND SUPERVISION OF UNIVERSEINE, THE ATHLETES' VILLAGE

Artelia contributed to the construction of this eco-neighborhood on an industrial wasteland, promoting sustainable construction, green spaces and biodiversity. Following the Games, the buildings initially designed to accommodate athletes are being transformed into housing and offices.

## DESIGN AND SUPERVISION OF THE PLEYEL URBAN CROSSING

This 300 m double bridge (part of which is planted with vegetation and dedicated to active mobility) crosses a wide set of railroad tracks to link two districts of the Saint-Denis municipality.

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## CHALLENGES

## **CLIMATE RESILIENCE & BIODIVERSITY**

The effects of climate change were clearly tangible in 2024. Heatwaves and major floods affected many countries, causing significant loss of life and damage. Highlighted by COP16 in Cali, the decline of the living beings is also becoming a major concern. As experts in climate resilience, we also include the preservation and restoration of biodiversity in our approach.

#### **COASTAL PROTECTION OF THE MAGDALEN ISLANDS - CANADA**

The shores of the Magdalen Islands have lost more than 9 meters since 2005, an erosion partly caused by climate change, which makes the island more vulnerable to storms and hurricanes.

The Ministry of Transport and Sustainable Mobility commissioned our teams to carry out a maritime hydraulic study, assess the risks of future erosion and flooding, and propose various coastal protection solutions.

#### **COASTAL AND MARITIME TERRITORIAL DEVELOPMENT PROGRAMME FOR THE MUNICIPALITY OF ASSINIE - IVORY COAST**

The World Bank has appointed Artelia to draw up a comprehensive development plan that takes into account the requirements of sustainable development, risks and the many different uses of this coastal area (buildings, infrastructure, recreational activities, etc.), in cooperation with the different coastal stakeholders.

#### WETLANDS MASTER PLAN FOR THE YERRES-SEINE **CATCHMENT AREA - FRANCE**

Artelia is assisting the SyAGE (Authority for sanitation and water management in the Yerres-Seine

catchment area) in drawing up a 'wetlands master plan' covering its territory of almost 1,100 km<sup>2</sup>. The objective is to develop a comprehensive 10-year action plan to protect and restore ecosystems that are essential to biodiversity and human society.

#### ATLAS OF METROPOLITAN **BIODIVERSITY OF NANTES - FRANCE**

The Nantes Metropolis wishes to make its general biodiversity atlas available to its 24 municipalities, a guiding document that provides an exhaustive understanding and aims to raise awareness among local stakeholders. Artelia is managing the production of all the content (habitats and species identified) and materials (synthesis map and information booklet) in partnership with a communications agency, for each municipality.

#### A NEW URBAN FOREST AT PLACE DE **CATALOGNE IN PARIS - FRANCE**

Previously involved in a study to transform several Paris squares into urban forests, our Group led the implementation of one of these projects for the City of Paris. The Place de Catalogne, formerly a very mineral square, now hosts a 3,220 m<sup>2</sup> forest area (470 trees planted) and a cycle path.

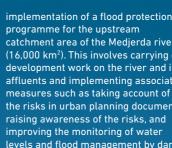
#### Strengthening flood adaptation capacities

#### Reducing floods in the lower **Canche valley - France**

Severely impacted in 2024, the Communauté d'agglomération des 2 Baies en Montreuillois (CA2BM) has appointed Artelia to draw up a comprehensive flood reduction strategy. The final objective is to implement a development programme that covers of all the causes (rainfall, run-off, rising water tables and tides, etc.) and the community's expectations, with a 50-year horizon.

#### Flood protection of the Medjerda valley - Tunisia

In partnership with SCET Tunisia, Artelia is assisting the Owner, the Ministry of Agriculture, Hydraulic Resources and Fisheries, and the funding agency, KFW, with the



Mer – France





catchment area of the Medjerda river (16,000 km<sup>2</sup>). This involves carrying out development work on the river and its affluents and implementing associated measures such as taking account of the risks in urban planning documents, levels and flood management by dams.

#### Hydraulic study of run-off and erosion for Grand Calais Terres &

The GCTM urban authority has appointed Artelia to carry out studies to prevent run-off and soil erosion in its area. After reviewing existing data, our teams split the catchment area (113 km<sup>2</sup>) into 14 sub-catchment areas

undertook a field survey and then carried out a hydrological analysis, identifying areas of production, transfer and storage using the IRIP method. Rainfall modelling using WaterSed was then used to map runoff volumes, the mass of soil eroded and rainfall infiltrated, while refining the assessment of erosive processes and sediment flows. Based on these analysis, priorities for actions in each area were defined, and soft hydraulic and semi-structural development solutions were proposed.

## ■ 曲 ⊞ CHALLENGES\_ **ENERGY** TRANSITION

Faced with huge increase in demand for electricity, we are reinforcing our commitment to renewable energies, network development and storage solutions. To contribute to the efforts to decarbonise the planet, we are also focusing on energy efficiency, the recovery of waste energy and the deployment of alternative fuels to oil.



#### MANY WIND AND SOLAR **PROJECTS - WORLDWIDE**

In Tanzania, our Group is supervising the construction of the 50 MWp Shinyanga photovoltaic power plant. In the Philippines, in Ilagan, we are carrying out the environmental and social study for a 440 MW solar power project. In Gueugnon, France, we are working on a floating photovoltaic installation. As the owner's engineer, our teams are also involved in the Savan 1 wind farm project in southern Laos, comprising 48 turbines with a total capacity of 300 MW.



#### **Commissioning of the Nam Ngum IV hydroelectric scheme – Laos**

After completing the design review and supervising the works, our teams commissioned this new hydroelectric scheme on the Nam Ngum river, one of the Mekong's tributaries affluents. It comprises a 68 m-high concrete dam, a 240 MW power station, a 17 km intake tunnel and a 35 km high-voltage (230 kV) line. It is expected to generate 870 GWh per year.

#### **COMMISSIONING OF SIAAP'S NEW BIOMETHANE FACILITY IN VALENTON - FRANCE**

Since 2021, Artelia has been supporting the SIAAP (Authority for wastewater treatment of the Greater Paris area) in the construction of this biogas to biomethane facility, for injection of the biomethane into the national grid. With a treatment capacity of 1,800 Nm<sup>3</sup>/h, it will be able to recover up to 45 GWh per year of biomethane produced from wastewater treatment sludge, at a local scale and without carbon emissions. It is the largest unit of its kind in France.

#### **OUR ONGOING INVOLVEMENT IN THE NUCLEAR INDUSTRY - FRANCE**

Artelia supports operators and plays an active role in the new nuclear industry (preparing for the increase in production capacity for major components and sites for the EPR2 programme). The Group is also active in fuel cycle facilities. In particular, the Group is involved in Andra's long-term storage project, the MGO loop at Pierrelatte and the creation of two new plants for Orano at La Hague.

#### SUBMARINE ELECTRIC CABLE **BETWEEN GERMANY AND** THE UNITED KINGDOM

The international NeuConnect consortium, which is installing a submarine cable linking the Isle of Grain in the UK to Wilhelmshaven in Germany, has chosen Artelia as technical consultant. We are working on the onshore converter stations and associated civil engineering works. This infrastructure will improve the UK's energy resilience.

#### WIDE DEPLOYMENT OF **ALTERNATIVE FUELS - EUROPE**

In Germany, our Group has planned the construction of the Autohof in Langenhagen, a 45,000 m<sup>2</sup> facility with 23 electric charging stations for cars and trucks and a hydrogen refueling station for heavy goods vehicles. In the Czech Republic, our teams are also supporting Orlen Benzina in the deployment of hydrogen and fast hydrogen refueling station. We are also working on similar projects in Spain, Portugal, Italy and France.

## CHALLENGES

## **SUSTAINABLE USE OF RESOURCES**

Given climate change, decarbonisation targets and public health issues, changing the way we use natural resources and construction materials is crucial. In particular, a specific effort must be made to strengthen re-use and recycling practices, a key element in the life-cycle approaches that guide our actions.

#### **EXTENSION OF WEEECYCLING'S FÉCAMP SITE** FOR METALS REGENERATION - FRANCE

Specialising in the circular economy of strategic and precious metals, WEEECycling offers its clients the opportunity to transform their scrap into high-purity metals that can be re-injected into their production. Wishing to increase its electronic board recycling capacity, the company has appointed Artelia to manage an extension to its existing plant, which will improve the recovery of various metals (gold, silver, platinum, palladium, etc.).

#### **INAUGURATION OF THE "REUSE" FACILITY AT ORLÉANS LA SOURCE - FRANCE**

Orléans metropolis has set up an innovative facility for the reuse of treated wastewater (REUSE) produced by the Orléans la Source treatment plant. The objective was to use this water as industrial water, but also to irrigate gardens and supply ornamental ponds in a large floral park (35 ha), without using water from the Loiret river. This treated wastewater is also used to supply hydro-cleaning trucks for the sewerage networks (replacing drinking water). Artelia was in charge of the design and the construction supervision of the project, supporting Orléans Metropolis from the design of the facilities, including their regulatory and health aspects, right through to acceptance. The facilities will supply around 100,000 m<sup>3</sup> of treated wastewater per day.

#### FILLING OF THE 'VIGIE' DAM IN **SAINT-PIERRE AND MIQUELON - FRANCE**

In collaboration with local company Ingénierie des Îles. Artelia was responsible for the design and supervision of the entire reconstruction of this 15-meter-high dam, which will be used to supply drinking water to the town of Saint-Pierre. The structure is a concrete gravity dam with a downstream backfill. Refilling of the reservoir should be completed in June 2025.

#### AN INNOVATIVE RE-TREATMENT PROCESS FOR THE KONGSBERG **WASTEWATER PLANT - NORWAY**

Artelia is managing the construction of an innovative wastewater treatment plant in Kongsberg. It uses a Norwegian method that consists of using a minimum of chemicals in the wastewater cleaning process, with both economic and environmental benefits. This solution also recovers a scarce resource, phosphorus.



#### **UPGRADING AND BRINGING UP TO STANDARD THE BEAUHARNOIS WASTEWATER TREATMENT PLANT - CANADA**

The municipality of Beauharnois commissioned Artelia to increase the capacity and remedy some operational weaknesses of its wastewater treatment plant. Our teams used dynamic modelling to simulate different options and propose the most effective and economical solutions.

upcycled and bio-sourced materials. The purpose was to demonstrate how these materials can best be integrated Award" at the Building Awards.



#### CHALLENGES **ADVANCED** (YX) **INDUSTRIAL FACILITIES**

Industrial production has to meet growing demand, driven by demographic growth, while striving to reduce consumption and emissions. Artelia supports the sector in its expansion and modernization, decarbonization, depollution and recycling projects.

#### **DESIGNING MORE POWERFUL, LESS** "IMPACTFUL" DATA CENTERS

As the world becomes increasingly digital, the expansion of artificial intelligence is considerably boosting demand for high-powered data management and storage facilities that are much more challenging, particularly in terms of cooling (water and energy consumption). Artelia is involved in several data center creation and modernization projects (130 MW of power, Uptime Tier III rating). Our teams are bringing all their expertise to reducing the environmental impact of these facilities.

#### **EFFLUENT TREATMENT AT INFINEUM'S BERRE L'ETANG PLANT - FRANCE**

A world leader in the lubricant additives sector, Infineum operates a site at Berre l'Etang, in the South of France, where complex chemical manufacturing processes are carried out in compliance with strict safety and environmental standards. To this end, it has awarded Artelia the overall management of a new effluent treatment project.

#### **TRANSFER OF A CHATO PACKAGING LINE - FRANCE**

L'atelier des fruits et légumes, a subsidiary of the Chato Group specializing in ready-to-use products, awarded us a design-to-commission contract for the transfer of one of its packaging lines. The new facility is intended to optimize the process flow, from the raw materials reception to the distribution of finished products.

#### **CONSTRUCTION OF A LOW ENVIRONMENTAL** FOOTPRINT PARACETAMOL **PRODUCTION UNIT - FRANCE**

Artelia is involved in many pharmaceutical development projects, particularly in Denmark and France, where it is contributing to the construction of a new paracetamol production unit for Segens in Roussillon (South of France). The new active ingredient production facility

will have an environmental footprint reduced by a factor of 5 to 10 compared with existing units (waste, energy consumption, CO<sub>2</sub> emissions from scope 1 and 2, etc.).

#### **NEW PRODUCTION LINE FOR MANITOU IN CANDÉ - FRANCE**

Artelia is producing turnkey welding jigging stations for Manitou, dedicated to the manufacture of material handling. As one of the world's leading manufacturers of people-lifting equipment, Manitou will thus be able to reintegrate previously outsourced production processes and limit the carbon footprint of associated movements.

#### **BATTERY GIGAFACTORY IN DOUAI - FRANCE**

Built next to Renault's Douai site, this battery manufacturing plant for electric cars will have an initial production capacity of 9 GWh for the first phase. The first cells are expected to be delivered in 2025. Artelia is providing technical assistance for the project.

#### CONSTRUCTION OF AN INDUSTRIAL BUILDING FOR AIRBUS HELICOPTERS - FRANCE

Artelia was involved in the construction of a building dedicated to the delivery of Airbus helicopters to their clients. The 800 m<sup>2</sup> heated and air-conditioned hall is equipped with a large sliding glass door leading to the runway and can be divided in 2 by a movable wall to create a "confidential" delivery area. The building was delivered in August 2024.

#### IMPLEMENTATION OF A BIOGAS FACILITY FOR WEPA GREENFIELD - FRANCE

WEPA Greenfield, a major French player in paper recycling, has appointed Artelia for the installation of a methanization unit at its Château-Thierry site. By converting wastepaper from its recycled paper pulp production into biogas, the company expects to reduce its factory's gas consumption by 50%.



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CHALLENGES\_



## REGENERATION OF THE BUILT ENVIRONMENT

Still facing a decrease in new office and residential construction (in Western Europe), key players in the sector are more inclined to renovate and upgrade existing buildings. However, demand for complex, technical buildings remains strong. Artelia is providing its expertise to meet these needs for sustainability and technical expertise.



#### A NEW BUILDING FOR THE FRENCH SPACE COMMAND IN TOULOUSE - FRANCE

Artelia is contributing, as technical expert, to a comprehensive contract (design-build-maintain) for the construction of the French Space Command (CDE) center and the Space Center of Excellence (COE) for NATO members. The building meets the highest standards in terms of safety and security, energy efficiency and environmental protection.

#### HIGH ENVIRONMENTAL STANDARDS FOR A RESIDENCE IN MADRID - SPAIN

Batipart awarded our Group the management of a project that takes full advantage of bioclimatic design and natural light to offer optimum comfort with minimum energy consumption. The residence features a cross-laminated timber structure and uses environmentally friendly materials. It produces most of its energy using photovoltaic panels and reuses rainwater to irrigate landscaped areas.

### OUTSTANDING CERTIFICATION OF THE VIETCOMBANK TOWER - VIETNAM

Artelia provided Vietcombank with its consulting capability and technical expertise in sustainable certification. The Vietcombank tower in Ho Chi Minh City is thereby the first building in Vietnam to achieve both LEED 0+M Platinum and WELL Core<sup>™</sup> Gold certification. Optimal air and water quality, 360° natural light, accessibility and safety, cleaning protocols using non-toxic products are among the sustainability and well-being criteria considered.

#### Sustained international development in the healthcare sector

#### New Smart Health Care City in Benguerir - Morocco

As part of the Green City of Benguerir, the Mohammed VI Polytechnic University (UM6P) is developing a healthcare city called Smart Health Care City (SHCC). Artelia is providing complete design and works supervision for the structure, fluids and utilities lots of this project, which includes a university hospital (200 beds), a recovery and rehabilitation center (120 beds) and a medium-stay geriatric center (70 beds).

#### Renovation and extension of the Toul Kork international polyclinic in Phnom Penh - Cambodia

Khema Global is modernizing its polyclinic in Phnom Penh, and has entrusted Artelia with project management, design, tender and construction management. The new structure meets all latest international standards for healthcare facilities and

allows best healthcare performance.



#### DEPOLLUTION OF LES GRANDES-SERRES SITE IN PANTIN - FRANCE

The municipality of Pantin, in the Paris region, decided to use the former halls of an industrial site to create a place for culture, leisure and walking. Artelia is managing the decontamination of the entire old buildings (asbestos and lead) and the deconstruction of some structures to enable the emergence of this new site.

#### KAJEN'S OPENING, THE FOOD UNIVERSE IN THE FISKETORVET-COPENHAGEN MALL - DENMARK

Offering nearly 40 waterfront restaurants on 4 floors and 6,500 m<sup>2</sup>: this is the recipe for the latest phase in Fisketorvet-Copenhagen Mall's transformation, in which Artelia is involved at a strategic level and with several specific projects. In this case, we provided a broad range of services from engineering design to construction management and health and safety coordination.

#### Oscar Lambret Medical Center, Lille - France

Our teams are providing complete design and supervision, as well as interior architecture, for this 97-bed cancer center, bringing their know-how in care path optimization.

#### New West Suffolk Hospital in Bury St Edmunds - United Kingdom

Artelia is involved in the design of this new hospital, on the Hardwick Manor site in Bury St Edmunds, which is being delivered under the UK Government's New Hospital Programme.

#### RENOVATION OF CAMPANILE HOTELS - FRANCE

Artelia is assisting Louvre Hotels Group in its renovation program for the Campanile and Première Classe brand hotels through a design and works supervision assignment.

### CLIMATE CHALLENGE LABORATORY AT TECHNICAL UNIVERSITY OF DENMARK

Inaugurated in November 2024, the research facility serves as a hub for interdisciplinary studies and innovation in green transition technologies. The building combines state-of-the-art laboratories with a seven-story timber office section. As engineer on the project, Artelia put massive effort into ensuring the technical conditions for the advanced research equipment such as the world's most advanced electron microscope, which is housed in the basement, customized for the extremely sensitive instrument.

## CHALLENGES **MORE LIVABLE CITIES**

All over the world, cities are restructuring, promoting the mixed use of urban districts, demineralization and revegetation, the development of active and collective mode of transport, the reuse of wasteland to limit property expansion, and the creation of urban cool areas... Artelia is an active player in this dynamic urban development.

#### **INAUGURATION OF THE RESTORED BRANCHE DE CROIX RIVER - FRANCE**

With 3.2 km of riverbanks, 4 ha of wetlands, 2.4 km of greenways and 8,000 trees planted, the restoration of the Branche de Croix area is an emblematic example of the re-creation of a green and blue network in urban environments. Connecting the towns of Villeneuve d'Ascq. Croix and Wasquehal (Lille conurbation). this water-based link facilitates active transport, offers a place to relax and promotes biodiversity. Artelia was in charge of the complete design and supervision of the renaturation of this river.

#### A NEW ENTRANCE FOR MOUNT **ROYAL PARK - CANADA**

Built in 1958, the road interchange at the heart of the Mount Royal heritage site, at the intersection of



Côte-des-Neiges and Remembrance roads, no longer met the public needs. The city therefore appointed Artelia to create a new entrance, truly worthy of this park, the most important in Montreal. The new entry area will give priority to pedestrians, cyclists and wildlife, reconnecting residents with their mountain.

#### **CONSTRUCTION OF THE URBAN GREEN RESIDENTIAL DISTRICT IN THU DUC CITY - VIETNAM**

Located at the heart of Ho Chi Minh City's innovation and technology hub, Urban Green is a 2-hectare mixed-use development consisting of two 23-storey towers, 6 villas, numerous green spaces, a cultural center and shops. Artelia is supervising the construction of this high-standard project, which has received a very high rating (32/40) from the Energy Department for Green construction Assessment.

#### **COMPLETE RENOVATION OF THE** WATERFRONT AT LA BAULE-**ESCOUBLAC - FRANCE**

The City of La Baule-Escoublac has launched the first phase of an ambitious 12-hectare project to upgrade public spaces along the waterfront. With areas dedicated to cyclists and pedestrians increased by 30%, planted areas increased by 50% and almost four times as many trees as in the former configuration, the project clearly gives priority to vegetation and active mobility. Particular attention has also been paid to water runoff as 80% of stormwater will be collected by infiltration with pre-treatment. Artelia is involved in a wide range of assignments, including complete design and supervision of urban development and civil engineering works, as well as environmental and regulatory studies.



Artelia is involved in this major urban regeneration project in the Milan area, which consists in transforming the disused area of the former racecourse into a mixeduse district (housing, shops, services). The project is designed to promote biodiversity and inclusion, with the objective of achieving LEED Neighbourhood Development and WELL Community certification. Our teams are involved in both design and construction stages to achieve the highest levels of architectural, environmental and social quality.



## CHALENGES\_

## SUSTAINABLE & MULTIMODAL MOBILITY

In an open, interconnected world, it is crucial to optimize transportation systems, by efficiently combining the various modes of transport and favoring low-carbon solutions. Covering the whole range of existing modes, Artelia supports all mobility players in their modernization and decarbonization projects.

#### CREATION OF THE PALMIRO-TOGLIATTI TRAMWAY LINE IN ROME - ITALY

Artelia is in charge of the design and supervision of the new tramway that will run along the Palmiro Togliatti boulevard. As part of Rome's Sustainable Urban Mobility Plan (PUMS), it will include 19 stops and 2 terminals along an 8 km line, and a number of connections with other transport facilities.

#### P'TIT TRAIN DU NORD LINEAR PARK IN FAVOUR OF ACTIVE MODES OF TRANSPORT - CANADA

Our teams worked on the rehabilitation of an 18-km section of this track dedicated to active modes of transport, which was suffering from technical problems, including drainage and inadequate foundations. The solution we proposed will provide safe access for a large public, including children, seniors and people with mobility needs.

#### INAUGURATION OF A KEY WORKSHOP FOR THE ELECTRIFICATION OF THE DANISH RAILWAY SYSTEM

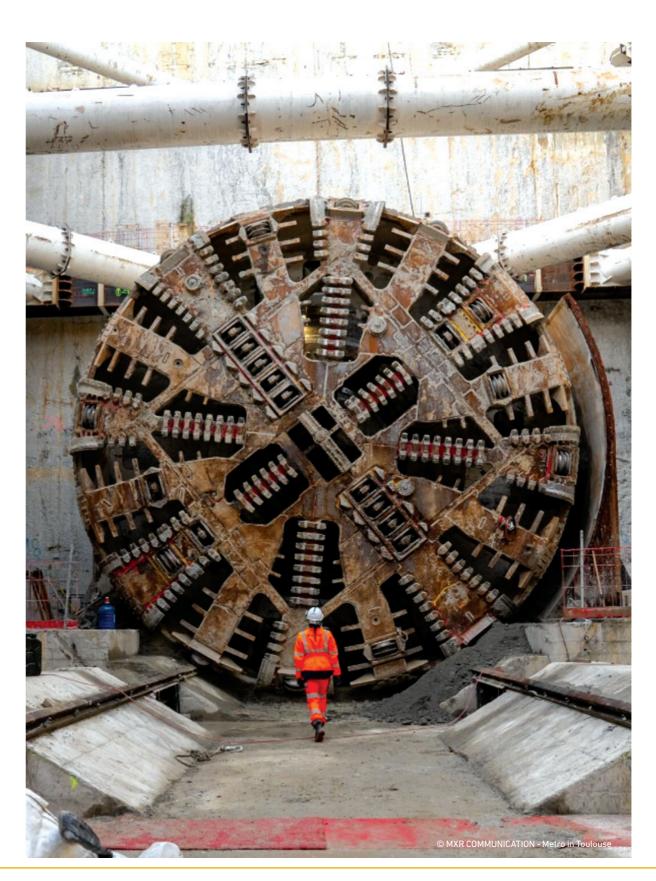
DSB, the Danish public company responsible for national rail transport, has invested in a new generation of electric trains, with the aim of making rail traffic CO<sub>2</sub>-neutral by 2030, and has decided to build three maintenance workshops dedicated to this rolling stock. Artelia is consultant of the contractor MT Højgaard Denmark on both the completed workshop in Copenhagen and an ever larger workshop in Næstved, which will also support international rail traffic.

#### MODERNIZATION AND DECARBONIZATION OF AIRPORT INFRASTRUCTURES - WORLDWIDE

Strengthened by the ADPI teams, now Artelia Airports, Artelia is involved in all the key components of airport platforms. In Abu Dhabi, Bahrain, Bangkok, Hong Kong, Paris and Riyadh, we have designed HQE buildings, designed and supervised aeronautical infrastructures, built new boarding bridges integrating electrical connection and air conditioning and replacing the use of buses, provided technical assistance for an autonomous transport system, coordinated the project to create a metro station, studied the deployment of an anti-drone system... Decarbonising airports is also one of the key challenges for which we offer appropriate solutions.

#### **REFURBISHMENT OF MONT-BLANC TUNNEL ROADWAYS - FRANCE**

After a four-year works period, the replacement of the slab under the Mont-Blanc tunnel roadway is now completed: 1,138 m of slabs have been replaced, using 2.50 m wide prefabricated elements. Artelia and its subsidiary Quadric, specializing in civil engineering structures, were responsible for the design and construction of the project. Most of the works were carried out at night, while the tunnel was closed.





## Metro: a growing dynamism

Artelia is strengthening its position in the design and construction of metro lines by proposing innovative solutions in line with the specific needs of each project, requiring major technical challenges in systems engineering, civil engineering and construction. Involved in the construction or extension of major infrastructures (Grand Paris Express - GPE, Tel-Aviv metropolis metro...), our teams contributed to the development of many projects during 2024: commissioning of line 11 extension and works kick-off for line 15 West-South of the GPE in Greater Paris region, digging of the North-West tunnel for the 3rd metro line in the Toulouse metropolitan area in South-West of France, launching of Infrastructure & Systems studies for the Tel-Aviv metro, prospective study on the feasibility of a metro in Bordeaux in South-West of France, modernization of communications for the Montreal metro

#### The city of Montreal at the forefront of transportation communications -Canada

In 2025, the public transport company STM will be completing the transfer of its radio network to 800 MHz TETRA technology and making a major step forward in metro safety and efficiency. With 68 stations and 72 km of underground tunnels, this project will ensure optimal connectivity. More than 2,500 terminals will enhance the coordination of operations and the reliability of communications. Thanks to this modernization, Montreal will have a high-performance network ready to meet the challenges of tomorrow's urban transport. Designing solutions for a positive life





#### PLEASE REFER TO OUR ANNUAL PUBLICATIONS

Extra-financial performance report Financial statements



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