CNIM

CONVEYING TRUST

2018 INTEGRATED REPORT

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Nicolas Dmitrieff

CHAIRMAN OF THE MANAGEMENT BOARD

“WE PRIDE OURSELVES ON BEING YOUR TRUSTED ALLY”

WHY DID YOU CHOOSE TRUST AS THE MAIN TOPIC OF YOUR 2018 INTEGRATED REPORT?

Nicolas Dmitrieff: Precisely because it is an integrated report, a document that outlines how the Group maintains a true bond of trust with its stakeholders and creates value for each of them, and reciprocally. Because trust is one of the company’s founding values, a constant in our industrial adventure, and that nothing is possible without shared trust between management and employees and between the company, its technology partners and its clients. For more than 160 years, CNIM has been designing technological solutions to help our clients, mainly large public and private contractors, to carry out government work in the fields of defense and energy and develop their industrial activities while limiting their environmental impact. It is a great source of pride to see our equipment and solutions play an integral part in the chain of value and trust that our clients build with their own stakeholders.

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“Our business successes confirm the merits of our unique positioning as a designer–builder, operator and service provider.”

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HOW DID THIS TRUST TRANSLATE INTO CNIM’S ACTIVITY IN 2018?

N. D.: At CNIM Environment & Energy, we ended the year with three major contracts. These new contracts are all the more significant as they are for the construction and operation of future facilities, thus confirming the merits of our unique positioning as a designer-builder, operator and service provider. In the UK, where we are already a leader in the construction of waste-to-energy plants with a 40% market share, we will be building the future Earls Gate plant in Scotland, with a 20-year operation contract *(see p. 19)*. At the end of 2018, we were also awarded a ten-year contract for the design, production and operation of the South waste facility in Saint-Pierre de La Réunion *(see p. 21)*. Finally, we will be building and operating the United Arab Emirates’ first waste-to-energy plant in Sharjah, under a 25-year contract *(see p. 23)*.

In Innovation & Systems, CNIM Industrial Systems posted good results, including a major contract with the French Navy for 14 EDA-S amphibious landing craft. We are pressing on with the strategic realignment of our Bertin subsidiary. After two further disposals of engineering businesses – ergonomics and scientific computing – we are now focusing on supplying equipment to the defense and nuclear sectors, on large scientific instruments, energy transition and software solutions for cybersecurity and cyber intelligence. With growth and profitability on the rise and a scope that is now more in line with the Group’s strategy, Bertin recorded encouraging results in 2018. We owe these remarkable results, which offer great prospects for the future, to our technological expertise. Our people were fully onboard to get projects up and running in 2018, in a climate that was exacting at times. The men and women of CNIM all contribute to the Group’s ongoing transformation while preserving the pioneering spirit that is our hallmark, giving us confidence to meet the challenges that lie ahead.

WHAT ARE THE KEY TAKEAWAYS FROM 2018?

N. D.: First, a rise in order intake, which was up 41.2% compared with 2017, with increases of 52.0% for the Energy & Environment Sector and 21.7% for the Innovation & Systems Sector. The Group’s revenue for 2018 reached €689.8 million, up 9.8% from the previous year. Income on ordinary activities could have been far better. It was negative to the tune of €4.3 million, with a negative contribution by Energy & Environment due to difficulties completing a specific project in the United Kingdom following the default of a civil engineering co-contractor, while Innovation & Systems contributed 5.4% to revenue. Even so, the Group’s share of net profit for 2018 rose sharply to €32.8 million, up from €20.5 million in 2017.

YOUR BUSINESS MODEL IS BASED ON SEVERAL ACTIVITIES. WHY DID YOU OPT FOR THIS STRATEGY?

N. D.: I’m convinced that this multi-business model is what makes CNIM a unique mid-sized company in the French industrial landscape. We design innovative technological solutions for our clients in the fields of energy and defense, with a comprehensive offering that encompasses R&D, design-build and service. Internal technological developments and targeted acquisitions have enabled us to add disciplines such as optronics and digital to our range of solutions, always bearing in mind our key markets. Our results in 2018 provide convincing evidence of the wisdom of diversifying risks by maintaining several activities within the Group. By nature, developments and issues vary widely from one business to another: in defense and security, the 2000s were very good years; by contrast, 2012-2014 was a far less buoyant period, but the situation has improved since then. For example, the Group achieved stellar results in turnkey waste-to-energy facilities in 2014-2015. Admittedly, our activities are cyclical per se, but I don’t think it’s a good idea to place all one’s bets on one horse. It’s better to spread the odds.

This model is also attractive in terms of human resources development, allowing employees to move on to other projects or business sectors within the Group. In 2018, internal mobility accounted for 20% of our hiring, with employees on permanent contracts taking up new positions.

IN WHAT FRAME OF MIND ARE YOU STARTING 2019?

N. D.: It’s not just about the numbers – we have confidence in our model, in our flexibility and in our innovative capabilities. We are continuing to invest in our industrial tool to support our clients’ projects. In 2019, our historical La Seyne-sur-Mer site will be equipped with a new building incorporating a clean room of more than 2,000 m2. Two new large-scale machining centres will be created, as well as a three-dimensional control room which will be the largest in France. We are also working on the digitalization of our activities, with the development of new equipment and services to accompany the energy transition and the supervision of our waste treatment plants.

Together with our employees, partners and clients, we are committed to a dynamic process of co-construction, designing innovative and technological solutions for a cleaner, safer, better protected and more energy-efficient world. This mutual trust cements our relations and is also the result of strong collaboration, often developed over several decades. In the following pages, we share stories from some of our major clients. I would like to thank them warmly for their contribution to this report.

“Our dynamic co-construction process leads to innovation for a cleaner, better protected world.”

1

DEUTSCHE TELEKOM

Minerva, a purpose-built, scalable strategic intelligence tool

Christina Sterenborg,
Head of Strategic Intelligence
at Deutsche Telekom

"Bertin was proactive in optimizing our collaboration, working in consultation with my team to design the roadmap. Trust has built up over the long term, nurtured by mutual respect: even when we come up against hurdles, such as data re-indexing or source optimization, our strong relationship helps us maintain the pace we have set ourselves. This positive attitude is showing results, enabling us to make headway in our adoption of smart digital processes."

Since 2013, Bertin IT, a partner of Deutsche Telekom, has been providing the strategic intelligence department of the European telecommunications leader with a web data aggregation platform that is essential to managing its strategy. Supported by Bertin's AMI Enterprise Intelligence software solution, the Minerva platform enables Deutsche Telekom to anticipate changes in its environment and identify growth opportunities.

A centralized web data aggregation platform offers multiple benefits, notably better organization of information, teams freed from manual processes, leaving them more time for data analysis and exchanges with the company's other departments, and easier information sharing. Since 2013, these functions have been combined into Minerva, a unique monitoring centre fully integrated into Deutsche Telekom's IT systems. This strategic intelligence platform is now used by 800 DT employees across Europe.

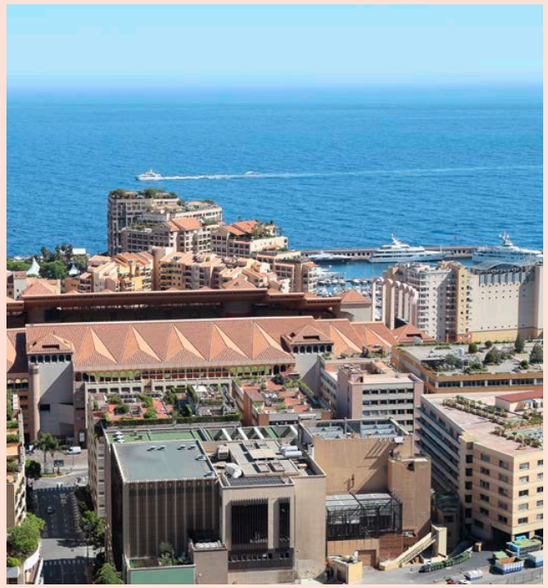
The reasons for this success? The close cooperation between the teams of the German operator's strategic intelligence department and Bertin IT, which has evolved over time from a simple client-supplier relationship to a long-term partnership. In 2013, there was just one small Deutsche Telekom cell using Minerva to retrieve information and transmit it to Deutsche Telekom's general management. The project gradually expanded to become a tool for disseminating analytical results and content. Deutsche Telekom intends Minerva to be used by 1,000 employees by 2020.

2

MONACO

At the forefront of waste-to-energy conversion

A building like any other in the Fontvieille district, just a few hundred metres from the Prince's Palace. You would never guess that it houses Monaco's waste-to-energy (W2E) plant and that it processes between 100 and 150 tons of household waste every day. It must be said that its architectural design is a model of urban integration. The plant recycles waste to electricity and steam, supplying the Principality's annual public lighting needs as well as two urban heating and air conditioning networks for public and semi-public buildings in the Fontvieille district. Commissioned in 1980, it will be operated until 2025, when a new plant will be built. As a partner of the incumbent operator, Société Monégasque d'Assainissement, for more than 35 years, CNIM developed a methodology and services to optimize the existing facility's maintenance process. The objective is to keep up the plant's environmental performance, maximize its availability and full treatment capacity up to 2025, while optimizing maintenance costs. This methodology is based on CNIM's long experience in maintenance operations and on-site support at all types of operating facilities of all ages. Thanks to its process expertise and in-depth knowledge of equipment, CNIM brings together versatile experts who can be mobilized within very short deadlines to meet all types of operator needs - troubleshooting, maintenance and servicing - including during unexpected shutdowns.



Edgar Enrici,
Director and Chief Executive
Officer of Société Monégasque
d'Assainissement

"Monaco has always been on the forefront of waste treatment. As early as 1898, the Principality acquired the first energy recovery plant in Europe. Since then, it has constantly strived to maintain the quality of its environment and its autonomy in waste treatment. A trusted partner since the 1980s, CNIM has supported it by mobilizing not only its teams but also the best available technologies."

3

ILE-DE-FRANCE

A new-generation sorting centre in Paris

Syctom, the metropolitan household waste agency, is the leading European public operator for the treatment and recovery of household waste. Its facilities receive and recycle the waste from 6 million inhabitants of 85 municipalities in the Ile-de-France region. In order to increase recycling and support the widespread sorting of all plastic packaging, reaffirmed by the French law on energy transition for green growth, Syctom has launched a project for a new-generation sorting centre in the Clichy-Batignolles eco-neighbourhood in Paris's 17th *arrondissement*. In 2015, Syctom entrusted a consortium led by CNIM with the design, production, operation and maintenance of the new facility. The consortium's project was unanimously selected by Syctom's tender committee. Operational in 2019, this selective collection and sorting centre, the second set up by Syctom in the inner city of Paris, will prepare household packaging waste for recycling, for a population of more than 900,000 inhabitants. With a processing capacity of 45,000 metric tons per year, i.e. 15 metric tons per hour, using 13 optical sorters, it will contribute to achieving the 75% recycling target set by law. New types of packaging will be sorted, including food trays, polystyrene and plastic films. The sorting centre, integrated into a dense urban area, showcases the technological know-how of the consortium members, CNIM, Urbaine de Travaux (Groupe Fayat), Ar-Val, Ingerop Conseil et Ingénierie, Ségic Ingénierie and Les Ateliers Monique Labbé. It meets Syctom's request for a high-performing sorting centre with an architecture blending into its urban environment.

Jacques Gautier,
Chairman, Syctom

"With this new-generation centre, located as close as possible to the waste production sites, we are preparing a more virtuous and sustainable model for the city of tomorrow, with the objective of zero non-recovered waste. Syctom is always looking for innovations to optimize the performance of its facilities and was able to count on the commitment of CNIM and its partners to make this project a success."

4

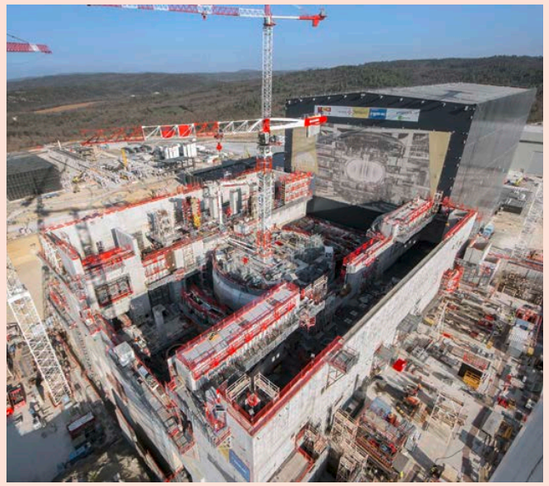
ITER PROGRAMME

The Sun and the stars, new sources of energy

Thousands of scientists, engineers and technicians have been involved in designing the world's largest tokamak, since the late 1980s. The ITER experimental reactor, under construction since 2010, intends to demonstrate that hydrogen fusion, the energy of the Sun and stars, can be used as a sustainable energy source to generate electricity on a large scale. For more than ten years, CNIM has been contributing its expertise to the ITER programme in the following fields: the study, design, development and manufacture of highly secure handling solutions as well as the industrialization and manufacture of large-scale equipment with high added value.
So far, CNIM has been awarded nearly 20 contracts for which the industrial company is constantly investing to strengthen the expertise of its teams and its industrial facilities.

The recent contract to develop the manufacturing and production process for the nine pre-compression rings reflects CNIM's pioneering spirit in meeting ITER's technological challenges. These glass/epoxy rings are designed to reduce the fatigue incurred by toroidal field coils subjected to strong magnetic forces. The solution proposed by CNIM – a particularly innovative manufacturing process based on pultruded composite material* – has shown its worth in terms of technology and reliability.

* Pultrusion (a term made up of the words "pull" and "extrusion") is a process for the continuous processing of composite tubes and profiles.



Bernard Bigot,
Chief Executive Officer,
ITER Organization

"An unparalleled scientific and technological research facility such as ITER needs industrial partners who are not only outstanding experts in existing technologies, but also pioneers in the technologies of the future that we need right now. CNIM, which came up with a highly innovative, first-of-its-kind solution in response to one of our needs, is one of the project's major partners and proved itself equal to the challenge: to pave the way for a new, secure energy source based on a virtually inexhaustible resource and with virtually no environmental impact."

OUR SOLUTIONS

Solutions

that inspire trust

CNIM was founded more than 160 years ago. And for more than 160 years, the men and women of CNIM have been imagining a cleaner, less wasteful, safer world. They visualise this better world, confident in their expertise and in the CNIM family group's commitment to supporting the company's development. From this mutual confidence come equipment and services that clients know they can rely on to go further.

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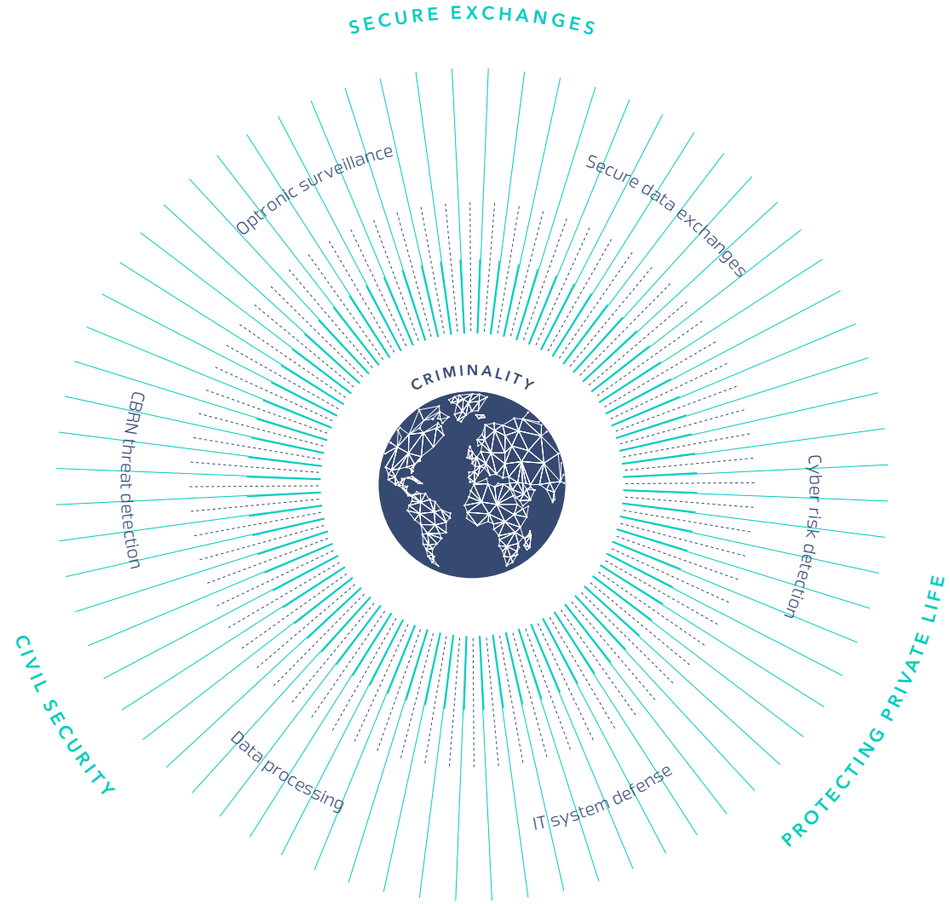
Producing clean energy

Resources are scarce and we now understand they are precious: nothing is inexhaustible... But everything can be transformed: nothing is lost! We can produce and consume in a less wasteful, smarter way, without undermining growth, without destroying nature, without leaving people behind. CNIM is a specialist in clean energy, energy recovery and storage, waste sorting and waste-to-energy. Because CNIM has confidence in the people and companies who know how to capitalize on the slightest resource, CNIM helps them transform themselves with confidence.

Fighting global warming

The climate is getting warmer, pollution is on the rise, the energy transition is a delicate process to implement... Our production systems, our consumption habits and the evolution of our lifestyles are leading our societies to envision a real industrial and social revolution, to reinvent processes and change behaviour patterns. CNIM is supporting this transformation by helping researchers to imagine clean energy, industrialists to be more energy-efficient, and maritime transport to reduce its carbon footprint. Because CNIM has confidence in people and companies with an entrepreneurial spirit, CNIM helps them build our energy future with confidence.

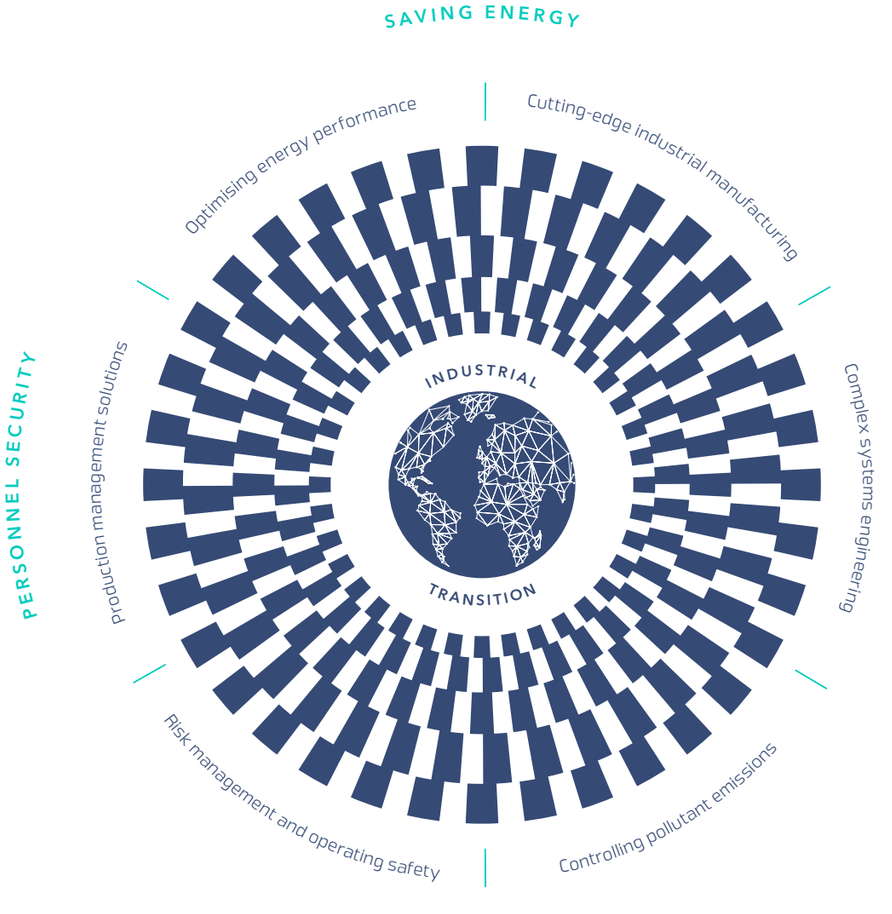


Ensuring the movement of goods and people

Exchanges are at the heart of our lives. Travelling, moving, talking, writing, exchanging documents or data, transferring money... Thanks to new developments in information technology, exchanging has never been easier. To ensure that this open society can thrive without concerns about people or facilities being threatened, data stolen, identities usurped, flows lost, signals ignored, CNIM is an expert in analysing, anticipating, detecting and protecting. Because CNIM has confidence in people and companies who want to share and connect, CNIM helps them exchange with confidence.

Preserving peace

Peace is a dynamic balance. Alliances are forged and unwound, borders shift, power relations are reversed... There is no static state that guarantees peace, but a perpetual reshuffling of situations, a perpetual reconfiguration of the protagonists. CNIM is one of the companies that design physical and digital tools for surveillance, prevention and action; tools that maintain the balance of powers. Because CNIM has confidence in the people and companies fighting for a peaceful world, CNIM helps them carry out their mission with confidence.



Supporting the industrial transition

In the 19th century, the world was transformed by the industrial revolution. One hundred and fifty years later, the challenges are many: producing more – or less, producing very quickly, producing very cleanly, producing more cost-effectively, less wastefully, more safely... Whether it is a question of respecting the environment, protecting people or integrating disruptive technologies, CNIM's expertise spans the entire value chain, from design to maintenance. Because CNIM has confidence in the people and companies who are reinventing industry, CNIM helps them innovate with confidence.

OUR ECOSYSTEM

CNIM, a trusted partner

Trust is at the heart of CNIM's day-to-day interactions with its ecosystem. It is this ability to work together over the long term that governs CNIM's balanced relations with its various stakeholders. It is this partnership approach that, combined with its pioneering spirit, has enabled CNIM to grow and evolve, with flexibility and confidence.

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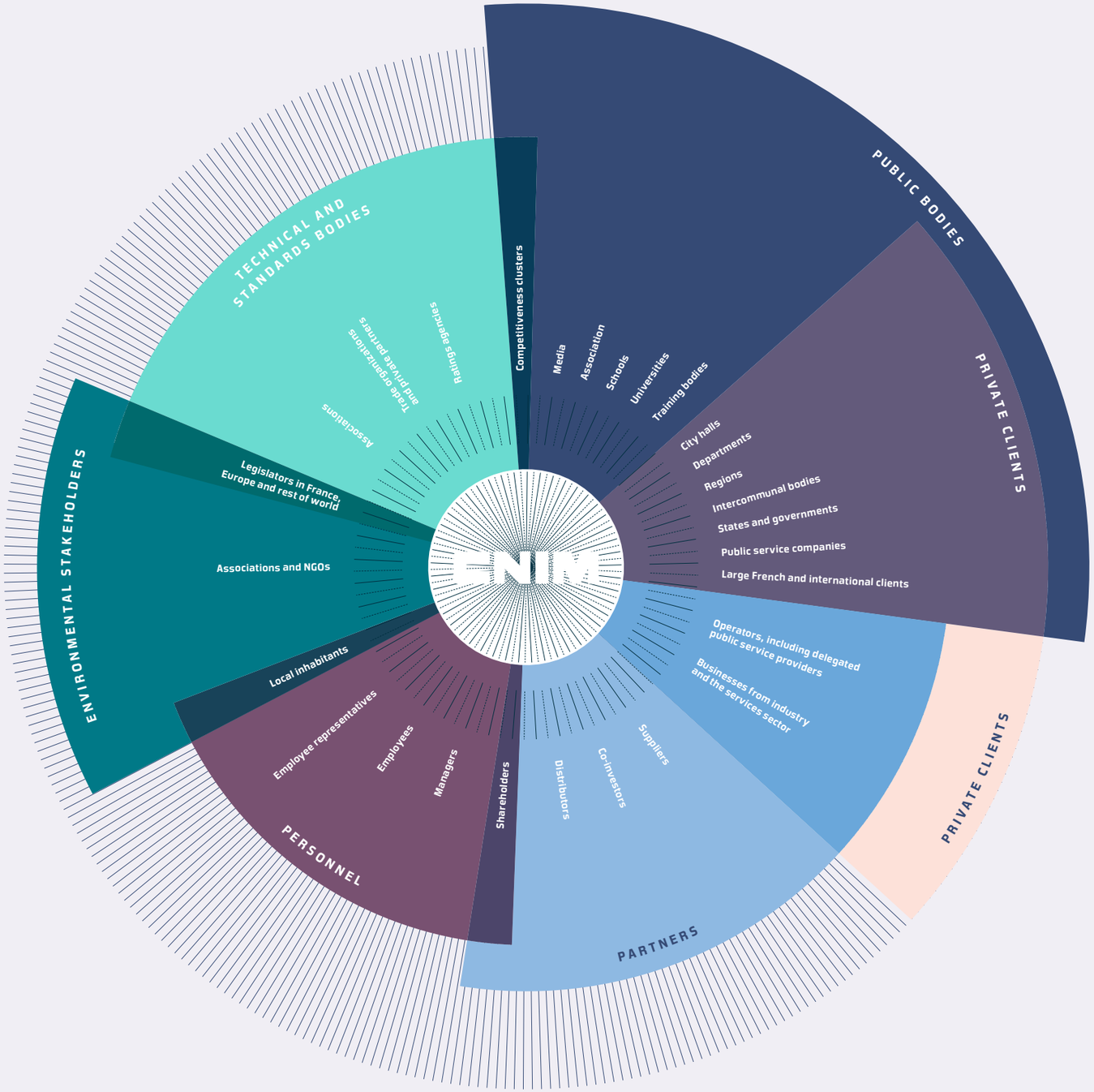
Our ecosystem

Private companies, public bodies, civil society and academia: clients, partners, suppliers or employees, all of these players constitute CNIM's ecosystem and contribute to its development. This ecosystem sets out all of the players who interact with the Group.

The ecosystem's profile ensures respect of these rich relationships: a client can also be a public player or a partner, an environmental player can have a normative or regulatory function, a shareholder can be an investor as well as an employee, and so on. The ecosystem thus maps the fabric of mutually beneficial relationships of which CNIM is the essential node. It is through this ethos of partnership that CNIM intends to develop over the long term.

One of the most notable examples is the partnership with the German company Martin. The two groups teamed up in the 1960s when CNIM wanted to develop in the waste recovery sector. Since then, they have formed close ties, with Martin being represented on the CNIM Supervisory Board. A special relationship that benefits both parties and continues to bear fruit. For instance, in 2017, the partnership took on a new dimension to cater to the needs of the vast Asian market, with the creation of an Indian joint-venture dedicated to the treatment and energy recovery of waste and biomass. Each group contributed its proprietary technologies and the mutual expertise born of half a century of joint projects and mutual trust.

> "It is through this ethos of partnership that CNIM intends to develop over the long term."



CARBON-FREE MARITIME TRANSPORT

OCEANWINGS®, HYBRID PROPULSION FOR SHIPS

Oceanwings® is a fully-automated, high-performance, furlable and reefable wingsail enabling hybrid propulsion, combining wind power and conventional propulsion. On the basis of a concept devised by VPLP Design, CNIM and VPLP Design completed the joint development of a product suitable for industrial production in November 2018.
The first two units, built by CNIM, will be tested on Energy Observer*. They will reduce this vessel's energy consumption and boost its speed. This will be a first step towards reducing the environmental impact of the global shipping industry. This technology, inspired by the hard wingsails used in the America's Cup, offers energy savings of between 18% and 42% depending on the vessel. These are significant figures as 90% of world trade transits by sea. Some 50,000 ships are a major source of air pollution, releasing atmospheric pollutants such as fine particles, nitrogen oxides (NOx) and sulphur oxides (SOx).

* Energy Observer is the first hydrogen-powered vessel, aimed at achieving energy autonomy with zero greenhouse gas and fine particle emissions.

ENERGY RECOVERY FROM BIOMASS

PICARDIE BIOMASSE ENERGIE

Picardie Biomasse Energie (PBE) was created in 2018 through an alliance between SABEHF (Société d'Approvisionnement en Biomasse Energie des Hauts de France), an Akuo Energy subsidiary, and CEB (CNIM Energie Biomasse), a CNIM subsidiary. Picardie Biomasse Energie operates two cogeneration plants using biomass in France's Somme department. They produce electricity that is fed into the RTE grid and steam that is supplied to agri-food and agri-chemicals plants. PBE covers the entire value chain, from the procurement and processing of wood used as an energy source to the supply of energy in the form of steam which is used to generate electricity and is supplied to industrial clients.

TREATMENT OF POTENTIALLY INFECTIOUS MEDICAL WASTE

Success for Sterilwave® in the UK

Enabling the safe, efficient conversion of potentially infectious medical waste, the Sterilwave® system is an innovative solution for the treatment of medical waste that can be installed directly in healthcare establishments. Numerous projects are ongoing all over the world (in Asia, Europe, the Middle East, Africa and America), notably including the installation of the UK's largest in-situ hospital waste treatment facility at West Middlesex Hospital, west of London.

NUCLEAR INDUSTRY

DEVELOPING THE NUCLEAR INDUSTRY OF THE FUTURE

The Jules Horowitz experimental nuclear reactor (JHR) is intended to study the behaviour of fuels and materials for nuclear power plants and to produce radioelements for nuclear medicine (medical imaging). CNIM has been involved in this project since 2014, when TechnicAtome asked it to build the large components of the reactor block forming the core of the JHR. CNIM mobilised its skills in the fields of electron beam welding and the machining of large-scale components along with its ability to comply with high-precision specifications. TechnicAtome then entrusted CNIM with the on-site manufacture and installation of the JHR "bunker floors" and a contract to design and construct the "bordering structures" to be installed around the reactor pool. These manufacturing operations began in 2019.

FLUE GAS TREATMENT

FIRST CONTRACT FOR LAB IN CHINA

Chongqing Sanfeng Yulin Environmental Energy Co. Ltd, a Chinese leader in waste treatment, awarded LAB a contract for the engineering and design of the flue gas treatment system at a new Luoqi plant in central eastern China. For this unit featuring four treatment lines and with a capacity of 3,000 metric tons of waste a day, LAB suggested a facility guaranteeing extremely low emission levels and no liquid effluents. It consists of a "zero-emission" flue gas treatment system comprising an electrostatic precipitator, high-temperature SCR* unit, economiser, conditioning tower, the SecoLAB® process with a maturation silo and polishing scrubber. This engineering contract, constituting LAB's first customer reference in China, strengthens its already excellent relations with Chongqing Sanfeng.

* Selective catalytic reduction.

ARTIFICIAL INTELLIGENCE

Bertin IT joins the academic chair in Industrial Data Analytics & Machine Learning

Created by Atos, CEA and Ecole Normale Supérieure Paris-Saclay, this chair aims to develop industrial data analytics related disciplines and technologies via a top-level training cycle as well as research and development work conducted in collaboration with startups and SMEs. Bertin IT's commitment to this chair, which it joined in 2018, will help develop self-learning models drawing on real-life data from its software platforms and leverage the direct utilisation of research work in the field of artificial intelligence.

CYBERSECURITY

Bertin IT obtains ANSSI Security approval

ANSSI, the French national information system security agency, awarded its security seal of approval to Bertin IT in June 2018. This stamp of approval clearly identifies the most reliable cybersecurity solutions assessed by approved laboratories using rigorous, dependable methodologies. This award acknowledges Bertin IT's unique expertise in the field of classified information partitioning issues and the secure exchange of sensitive data.

WASTE-TO-ENERGY

A 12TH PROJECT FOR CNIM AND CLUGSTON IN THE UK

CNIM and Clugston, its long-term civil engineering partner, won a contract to build the Earls Gate waste-to-energy plant in Scotland. This is the twelfth project undertaken in the UK by a joint venture between CNIM and Clugston. CNIM will design the plant, commission the waste-to-energy processes and operate the centre for 25 years. Earmarked for a consortium comprising Brockwell Energy, Green Investment Group (GIG) and Covanta Energy, this project responds to regulations prohibiting the disposal of biodegradable household refuse in landfills as from 2021. Coming into service in 2021, the Earls Gate Energy Centre (EGEC) will treat 216,000 metric tons of waste a year, representing 20% of all household refuse currently disposed of in landfills in Scotland. It will produce 79 GWh of green electricity and 81 GWh of heat in the form of steam. EGEC will also provide a low-cost source of green energy for local businesses. This is CNIM's 21st project reference in the UK and its first in Scotland.

OUR STRATEGY

3

Three development priorities

CNIM'S STRATEGY
reflects its understanding of sovereignty issues, its long-term business view and its ability to forge core partnerships. Its strategic efforts focus on three complementary priorities and are implemented by managers at every level of the Group.

Develop the added value chain

CNIM has created a unique profile as an industrial contractor that designs equipment in its engineering offices, manufactures it in its workshops in France, Germany, the UK, Morocco and China, commissions it and then takes charge of its maintenance. It also operates equipment which may include installations supplied by other manufacturers. Close contact between its design and production teams facilitates feedback. CNIM also offers the ability to set up project companies and offer financing solutions for projects covered by build and operate contracts. Backed by its knowledge and understanding of their value chain, CNIM is able to assist its clients as an industrial prime contractor or in collaboration with partners.

PROJECTION OF ARMED FORCES

14 new EDA-S landing craft for the French Navy

CNIM and its partners, Socarenam, Mauric and CNN MCO, won the contract to replace the French Navy's landing barges. Fourteen new standard amphibious landing craft (EDA-S) are to be built over a 10-year period. These vessels will conduct amphibious operations from the well decks of projection and command ships carrying troops, military equipment or vehicles. They will be capable of taking part in logistics operations depending on their location. CNIM is asserting itself as a key player in the field of amphibious operations with its complementary innovative vessels, the EDA-S along with the EDA-R rapid amphibious landing craft, four of which are already in service with the French Navy.

WASTE-TO-ENERGY

ZERO WASTE TRAJECTORY FOR REUNION ISLAND

ILEVA, the joint syndicate for waste treatment in Reunion Island's southern and western micro-regions, awarded the CNIM-led consortium a comprehensive performance-based contract to design, build, operate and maintain the Pierrefonds South waste facility.
This consortium is made up of firms that are all leaders in their fields: Spie Batignolles, GTOI, Colas, Bollegraaf, Naldeo, Atelier Architectes and Architrav.
This multi-channel facility, which won the ADEME invitation for energy projects in 2016, will promote the island's circular economy. It combines units for the sorting and processing of recyclable materials and solid recovered fuels, anaerobic digestion of biowaste and energy recovery from those fuels, all on a single site. The facility will treat 60% of inhabitants' waste and generate renewable electricity for more than 10,000 homes. By producing renewable energy and reducing waste burial by 90%, this project will respond to the requirements of the energy transition law promoting green growth. This means reducing waste burial by at least 50% by 2025. This project will contribute to transforming unavoidable waste into resources and reduce landfills by a factor of 10 by 2023.

Integrate new technologies

The Group's business portfolio is regularly reviewed. Analyses of its commercial positions in high-potential markets where it intends to speed up its expansion can lead it to make targeted acquisitions while, at the same time, selling off businesses that do not offer optimal synergies, even if they are profitable. CNIM thus works to build a coherent product and service offering over the long term for French and international clients recognizing it as a trusted firm mastering all technologies involved in the design and construction of end-to-end solutions, able to handle complex orders and evolving in step with its markets.

RESEARCH & DEVELOPMENT

A YEAR RICH IN INNOVATION AND DEVELOPMENT

CNIM Environment & Energy is using its unique position as a turnkey designer-builder and operator of waste-to-energy and biomass-to-energy plants as a springboard to roll out a differentiating R&D programme. It is focused on optimizing the processes used in these installations, the yield obtained by waste-to-energy processes and the efficiency of flue gas treatments. Its aim is to maximize energy efficiency and minimize environmental footprints. Two patented processes have been successfully tested on a number of installations. CNIMCLEAN® is a physicochemical boiler cleaning process that increases the availability and processing capacity of installations and is complementary to existing cleaning systems. In addition, two TERMINOx High Dust® prototypes commissioned in 2017 have convincingly demonstrated their performances after more than a year in service. This nitrous oxide and dioxin treatment process, integrated into the stack, enables the low thresholds specified in European BREFs regulations to be achieved at very low CAPEX and OPEX and with a reduced environmental footprint.

* BREFs: Best Available Techniques Reference documents.

ENERGY RECOVERY

Recovering heat by flue gas condensation

Ørsted, the leading Danish electricity and heat producer, asked LAB to design, engineer, supply, install and commission a condensing flue gas heat recovery unit. This unit, to be installed at the biomass-fired power plant in Herning, will boost the plant's efficiency by enabling it to produce an additional 41 MWth. LAB's flue gas condensation solutions increase the energy efficiency of installations and can be combined with all other flue gas treatment processes.

LA SEYNE -SUR-MER

INVESTING TO MAINTAIN OUR CUTTING-EDGE INDUSTRIAL FACILITIES

CNIM is pushing ahead with the development of its industrial facilities with the purchase of a flow-forming machine. This machining process, widely used in the automotive industry, consists in stretching a metal sheet into a truncated conical shape. It can be used to work on metal sheets but not rough castings. Procurement is therefore easier and parts can be shaped more quickly and with less wasted material. CNIM is currently working on its adaptation to meet the specific requirements of large-sized parts for the space industry, notably in terms of obtaining high-quality material and high-precision dimensions.

Conquer new markets

CNIM adapts its products and services to the changing needs of States and companies. After analyzing local issues, it seeks out the best partners, both industrial and financial, and takes full advantage of the resources available through its existing well-established international platforms, whether they be commercial hubs (Abu Dhabi and Singapore) or industrial facilities (France, China, Morocco, United Kingdom and Germany). This strategy supports CNIM's goal of developing its status from exporter to international group.

WASTE-TO-ENERGY

Sharjah, location of the first waste-to-energy plant in the United Arab Emirates

Masdar, Bee'ah and CNIM finalised their Design, Build and Operate agreement for the first waste-to-energy facility in the United Arab Emirates. Located in Sharjah, this facility is the flagship project of the Emirates Waste to Energy Company, a joint-venture between Masdar and Bee'ah that has secured financing commitments from Abu Dhabi Fund for Development (ADFD), Abu Dhabi Commercial Bank (ADCB), Siemens Financial Services, and Sumitomo Mitsui Banking Corporation (SMBC). Designed to meet the strictest environmental requirements in accordance with the European Union's Best Available Techniques, widely recognised as the global standard, the plant will treat more than 300,000 tonnes of municipal waste a year, equivalent to 37.5 metric tons of waste per hour, and will produce some 30 MW of electricity. It will enable the United Arab Emirates to reach its goal of achieving a 75% reduction in the volume of municipal waste disposed of in landfills by 2021.

SOLAR ENERGY

A WORLD FIRST IN LLO

Project company ELLO, 51%-owned by SUNCNIM and 49% by Caisse des Dépôts et Consignations, is finalizing the construction of the world's first concentrated solar power plant with the ability to store several hours' worth of power at Llo, in France's Pyrénées Orientales department. Eco-designed and with 100% recyclable or reusable components, it uses Fresnel mirror technology. This technology is based on capturing thermal energy by means of mirrors which track the path of the sun and focus the sun's rays onto a receptor, the solar boiler. This thermal energy can be stored as saturated steam or converted into electricity by a steam turbine. The plant is built on a 36-hectare site, equivalent in area to 50 football pitches. Some 95,200 mirrors provide a 153,000 sq.m reflective surface. With an output of 9 MWe, enough to power about 6,000 households, the Llo solar plant will produce renewable electricity that will be exported to the national grid. Nine tanks with a total capacity of more than 1,000 m^3 will store the saturated steam under 80 bar pressure, enabling the power plant to operate at full load for four hours during periods when the sun is not shining. The Llo plant confirms the success of CNIM's research and investment strategy in the field of concentrated solar power. This project's main phases were the design and manufacture of a prototype on CNIM's industrial site at La Seyne-sur-Mer in 2010, the concept's validation by ADEME in 2012 and the setting up of the SUNCNIM subsidiary with backing of the Bpifrance SPI fund.

Our value creation model

By mastering every step in the process of engineering innovative solutions, from design to maintenance, CNIM has positioned itself as a central player in the market for high-tech equipment and services which aim to make the world safer, better protected, more energy efficient and more respectful of the environment.

OUR BUSINESS MODEL

Defending a country, ensuring the digital security of economic actors, managing waste intelligently in order to convert it into energy sources, optimizing the energy performance of industrial facilities…
Actions of these types cannot be carried out without the involvement of industrial firms capable of efficiently implementing policies while adapting to circumstances on the ground, backed by their specific technical expertise and desire to take up challenges.

CNIM has solid research and development skills together with top-quality industrial capabilities. The often bold solutions it proposes to its clients are backed by innovation and industrial strength. Its long-held skills (thermal and mechanical engineering, expertise in industrial contracting) and recognised mastery of new technologies make CNIM a key player in the fields of defense and civil security, energy and the environment. In addition to addressing these vital issues, CNIM plays an active role in large scientific and industrial research projects.

DEFENSE AND CIVIL SECURITY

CNIM delivers responses to issues related to the physical and digital security of States, local authorities, citizens and vitally important players including businesses and institutions. The aim is to guarantee the security of populations, within the framework of a stable society, by preserving infrastructure and protecting data exchanges.

ENERGY AND ENVIRONMENT

CNIM makes optimal use of waste and energy resources through long-term, environmentally-friendly solutions. Its goals are to reduce energy consumption and produce greener energy to support sustainable development.

MAJOR PROJECTS

CNIM provides technologies and solutions for large industrial and scientific research projects. It seeks to boost France's international profile and, more generally, global scientific research. The men and women of CNIM harness their pioneering spirit to tackle these global challenges and, true to the Group's motto, they innovate and act to develop solutions for today and tomorrow.

RESOURCES

FINANCIAL
• Stable family share ownership since 1966.
• Financial partners.

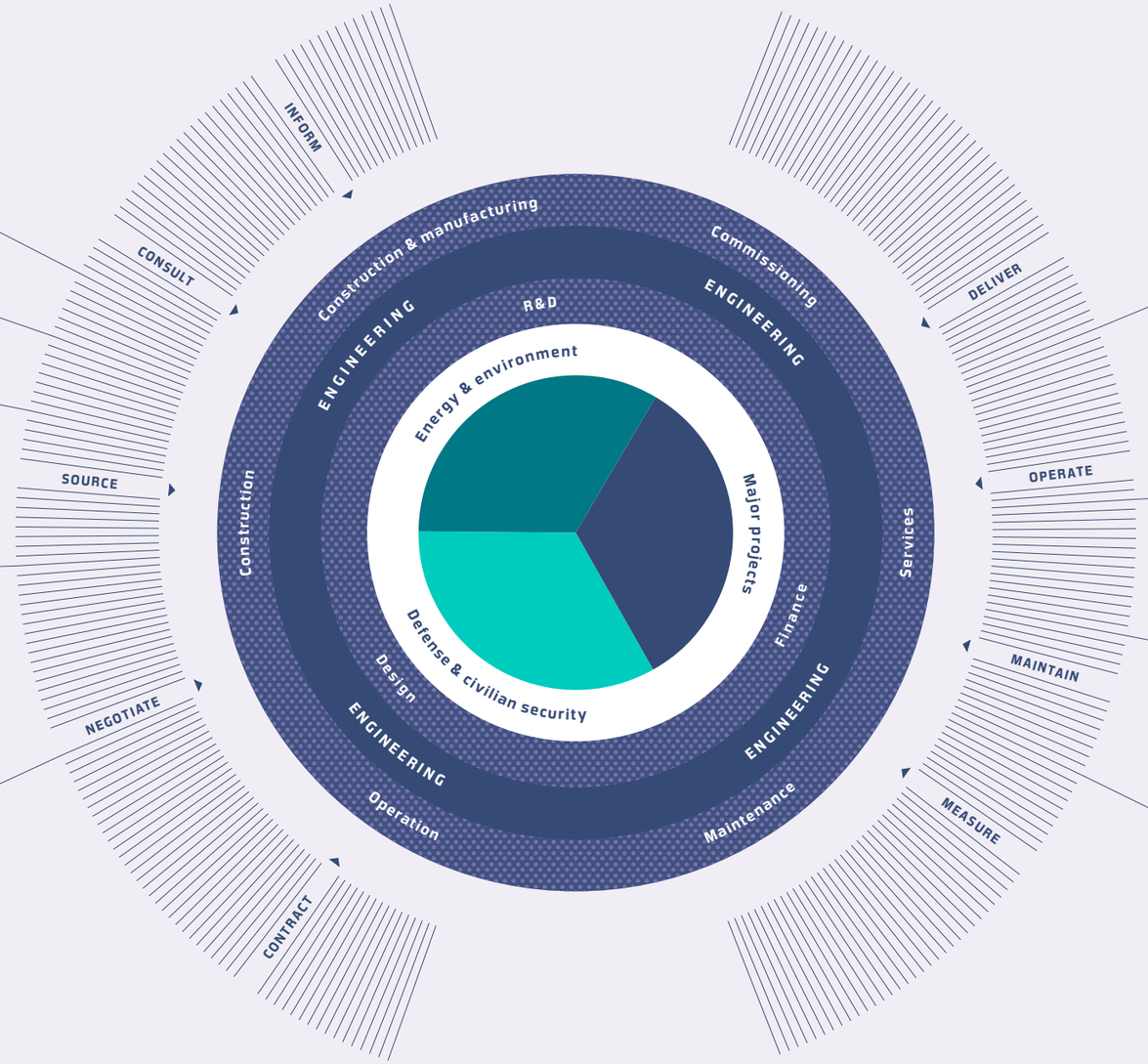
INDUSTRIAL
• Cutting-edge technological expertise.
• State-of-the-art industrial facilities.

TECHNOLOGICAL
• R&D.
• Patent portfolio.
• Proprietary technologies.

HUMAN
• 2,600 employees carrying out projects in around 100 countries worldwide.
• Corporate human capital development programme.
• Certifications (OHSAS 18001, MASE, ISO 45001).

RELATIONAL
• Long-term relationships with our subcontractors, suppliers, partners and customers.
• Corporate-level ethical and corruption risk management system.
• Active participation in competitiveness clusters.
• Engagement with the academic community and industry associations.

ENVIRONMENTAL
• Diverse raw materials (energy sources: domestic waste, biomass, organic waste, solar, etc.).
• Energy certifications.



IMPACTS

FINANCIAL
• Sustainability and stability.
• Growth.
• More than half of revenues from export markets.

INDUSTRIAL
• Sought-after employer.
• New facilities (for energy production, energy efficiency, environmental impact reduction, data security, security for sensitive facilities, technological support for armed forces).

TECHNOLOGICAL
• New patents.
• Academic partnerships: participation in PhD projects, etc.

HUMAN
• Hiring.
• Employee training.
• Shared business culture.
• Internationalization: development of an appropriate cultural approach to customers and business partners, including suppliers.

RELATIONAL
• Joint commitment with suppliers to identify and improve employment and environmental performance, in particular.
• Technological and industrial partnerships and sales contracts reaching back decades in some cases.
• Joint ventures.

ENVIRONMENTAL
• Energy efficiency (renewable power generation, energy recovery, etc.).
• Reduced environmental footprint of industrial activities of CNIM and customers.

WASTE-TO-ENERGY RECOVERY

Azerbaijan, a country at the cutting edge of waste-to-energy recovery

CNIM has built and operates Eastern Europe's largest household waste-to-energy plant near Baku, in the Republic of Azerbaijan. This facility, replacing a landfill site, avoids the emission of 500,000 tonnes of CO_2 a year and protects the environment from pollution. Under the supervision of the Ministry of Economy, the state-owned Tamiz Shahar JSC company responsible for disposal and utilization of household waste for the city of Baku awarded CNIM a contract in 2008 to design and build a waste-to-energy center and operate it for 20 years. With two 33 tonnes/hour incineration units, the facility has the capacity to treat 500,000 tonnes of household waste and 10,000 tonnes of hospital waste a year. The 231,500 MWh of electricity generated from heat is enough to supply the equivalent of 50,000 households. The plant is ISO 14001 certified and meets the strictest European and Azerbaijani standards applicable to polluting industrial emissions. The scale of this project illustrates CNIM's unique positioning and its ability to take charge of every step of the value chain in its customers' projects, from design through to operation.

OPTRONICS

INTEGRATING BERTIN INSTRUMENTS' CAMSIGHT® MODULE IN EXENSOR'S SCOUT CAMERA

A first collaboration between Bertin and Exensor led to the successful integration of Bertin's optronics technology into an Exensor sensor. CamSight® is an OEM (original equipment manufacturer) camera developed by Bertin Technologies based on the jointly-developed optronic core of the FusionSight® day and night vision monocular and the PeriSight® land situation awareness system. CamSight® has been integrated into the Exensor Scout camera and is to be supplied to an Exensor customer in Asia. Scout is a wireless smart camera with built-in motion detection that is part of the Flexnet UGS platform developed by Exensor and supplied to military and civilian clients worldwide. This first collaboration came just four months after the acquisition of Exensor by Bertin Technologies.

WASTE-TO-ENERGY RECOVERY

Viridor renews its confidence in CNIM

Following the contract for a plant in Beddington, south London, CNIM is building a fourth waste-to-energy (W2E) facility at Avonmouth, near Bristol in the UK, for Viridor (Pennon Group). The facility, constructed in collaboration with the Clugston civil engineering firm, comprises two lines with a capacity of 20.6 metric tons/hr. It will export up to 34 MWe to the power grid and will be equipped with a SecoLAB™ flue gas treatment system supplied by CNIM's LAB subsidiary. Once in operation, it will avoid the disposal in landfills of 320,000 metric tons of non-recyclable waste that will be used to produce energy. It will generate up to 37 MW of electricity, enough to power about 44,000 households as well as covering its own consumption. This is the 167th turnkey facility to be built by CNIM worldwide. Twenty-three have now been delivered by CNIM in the British Isles.

PROJECTION OF ARMED FORCES

Upgraded version of the PFM* for the French Army

Offering two possible configurations – bridge mode and ferry mode – CNIM's "PFM" motorized floating bridge gives a clear tactical advantage and its implementation performance remains unmatched. In 2019, CNIM is supplying the French Army with an upgraded version of the PFM fitted with new equipment. A single control system enables a ferry consisting of two modules to be controlled by just one operator using a wireless control console. This innovation will give the PFM an additional advantage for making quick crossings, especially at night. CNIM's motorized floating bridge is currently in service with a number of armies, including France, Italy, Switzerland and Malaysia.

* PFM: Pont flottant motorisé (motorized floating bridge).

ENERGY TRANSITION

CNIM supporting the coal-to-biomass transition

By 2022, France will no longer be using coal to produce electricity. In that context, CNIM is offering solutions to enable coal-fired plants to make the transition to biomass. CNIM has developed an analytical approach based on the Group's experience acquired at the Kogeban plant and at Estrées Mons, in France's Somme department, on the transposition of its expertise in the field of waste-to-energy processes and the use of new technologies, services and solutions such as the CNIM Boiler Monitoring System (CBMS). Developed in 2018, CBMS is a smart system which monitors gas temperatures in the boiler and controls conventional, preventive and remedial cleaning devices. It increases facilities' energy efficiency and availability as well as optimizing costs by making the best possible use of the various cleaning options. Thanks to this development, CNIM is leading the field for coal-fired installation retrofit operations and is gaining invaluable expertise for work on new installations.

ENERGY RECOVERY

A HEAT PUMP FOR CLEANER, MORE ECONOMICAL URBAN DISTRICT HEATING

The town of Brive-la-Gaillarde, in France's Corrèze department, wanted its under-construction district heating network to be connected to the waste-to-energy (W2E) plant at Saint-Pantaléon de Larche. After issuing an invitation to tender in 2018, the W2E plant owner, Syttom 19 household waste transport and treatment syndicate of Corrèze, awarded the contract to CNIM Centre France, which was operating the plant, in collaboration with CNIM Industrial Systems. In 2019 CNIM is to supply and install a heat exchanger and a heat pump using steam from the plant's boilers and low-pressure steam from the turbine. In recovering this heat, which is usually released to the atmosphere, the heat pump will reduce the steam consumption by 40%. A noteworthy feature of this project is that the equipment will be connected directly to the low-pressure system – an unprecedented innovation in this sector.

THE MEN AND WOMEN OF CNIM

2,613 employees

OF WHICH:

55% engineers and managers

24% employees, technicians and supervisors

21% workers

90% of employees **hired under permanent contracts**

3.8% **average pay gap** between men and women. The percentage in the European Union* is 16%
* Source ILO, 2016 data.

€2.5 **million** spent on security in 2018

INNOVATION

A portfolio of proprietary **technologies** and **126 patent families**

SIX OR SEVEN
patents filed each year by the LAB subsidiary

8
R&D programmes under way at Bertin

PRODUCTION

8 **industrial sites spanning three continents:** La Seyne-sur-Mer, Thiron-Gardais, Pertuis, Montigny-le-Bretonneux (France), Frankfurt (Germany), Basingstoke (United Kingdom), Gaoming (China), Casablanca (Morocco)

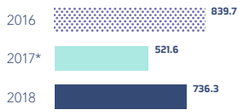
100% **of waste-to-energy facilities** operated in France by CNIM have been ISO 50 001 certified since 2018

14 **waste-to-energy plants** ordered from CNIM in the United Kingdom over the last eight years

100 **million inhabitants** have their waste recovered by CNIM

2018 RESULTS

ORDER INTAKE
in millions of euro



ORDER BOOK
in millions of euro

* After adjustment for the impact of standard IFRS 15.

REVENUES

€689.8 millions

of which 62.1% was from exports

RECURRING OPERATING INCOME

€(14.9)M **Environment & Energy sector**

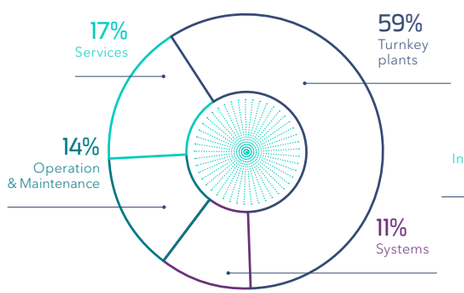
€10.7M **Innovation & Systems sector**

NET INCOME

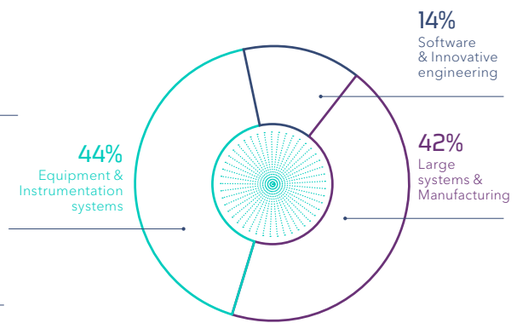
€32.8 million

BREAKDOWN OF REVENUE

ENVIRONMENT & ENERGY SECTOR



INNOVATION & SYSTEMS SECTOR



The Management Board is the Group's decision-making body. It implements the strategic guidelines determined by the Supervisory Board. The Supervisory Board verifies with the Management Board that the management and control systems are equal to ensuring the reliability of financial information. A Group Management Committee was set up in 2017 to round out this system and support the Group's transformation. This Committee steers the Group's various activities, organization and operational performance. It is also a forum for regular exchange and reflection on strategy, as well as on issues of general interest to the Group. It ensures full cohesion in the implementation of the decisions taken by the Management Board.

Management Board

- Group Directors Committee

Nicolas Dmitrieff
Chairman

Stanislas Ancel
Chief Executive
of the Environment & Energy
Sector, Chairman of SUNCNIM

Philippe Demigné
Chief Executive
of the Innovation & Systems Sector,
Chairman of Bertin Technologies,
in charge of Human Resources
and Communications

Christophe Favrelle
Finance Director,
in charge of Information
Systems

Claude Boutin
Deputy Chief Executive of the
Environment & Energy Sector

François Darpas
Deputy Chief Executive of the
Environment & Energy Sector

Frédérick Favre
General Counsel, Compliance, Risks,
Insurance and CSR,
Secretary of the Management Board

Christophe Hamon
Information Systems Director

Philippe Lazare
Chief Executive of
the Industrial Systems Division

Jean Roch
Deputy Chief Executive
of Bertin Technologies

Bruno Vallayer
Deputy Chief Executive
of Bertin Technologies

Supervisory Board

- Strategic Committee
- Audit Committee
- Dmitrieff-Herlicq Family

Christiane Dmitrieff
Chairwoman of
the Supervisory Board

François Canellas
Vice-Chairman of
the Supervisory Board
Chairman of the Audit Committee

Sophie Dmitrieff
Member

Lucile Dmitrieff
Member

André Herlicq
Member

Stéphane Herlicq
Member

Sigrid Duhamel
Independent Member

Louis-Roch Burgard
Independent Member
and Chairman of the Strategic
Committee

Agnès Herlicq
Frel S.A.

Johannes Martin
Member

Ulrich Martin
Martin GmbH

François Herlicq
Honorary Member

Alain Sonnette
representing employee
shareholders

Frédérick Favre
Secretary of
the Supervisory Board

"CNIM AND MARTIN SHARE MORE THAN HALF A CENTURY OF HISTORY. OUR INDUSTRIAL AND TECHNOLOGICAL PARTNERSHIP IS BASED ON SHARED TRUST, THE FOUNDATION OF OUR ROBUST, SUSTAINABLE DEVELOPMENT."

Johannes Martin
Member of the Supervisory Board

"In my capacity as Chairwoman of the Supervisory Board,

I am the guarantor of the continuity of our industrial and family history. I am responsible for ensuring CNIM's sustainability by making decisions for the long term. Our family shareholding gives us stability, responsiveness and the ability to act boldly. I have full confidence in the commitment of all our employees to implementing our strategy."

Christiane Dmitrieff
Chairwoman of the Supervisory Board

"I sit on the Supervisory Board as a representative of employee shareholders and I am very proud of the trust they place in me. The Board works seamlessly with the Management Board to build CNIM's future. At each of our working sessions, I realise anew how much care the Board takes to maintain trust with both the men and women who make up the Group and our clients."

Alain Sonnette
Member of the Supervisory Board
Representing employee shareholders

"I ENJOY THE WEALTH OF VIEWPOINTS EXCHANGED AT OUR SUPERVISORY BOARD AND STRATEGIC COMMITTEE MEETINGS AND THE MUTUAL TRUST EXPRESSED DURING THESE DEBATES, WHERE MAJOR DECISIONS FOR THE GROUP'S FUTURE ARE MADE."

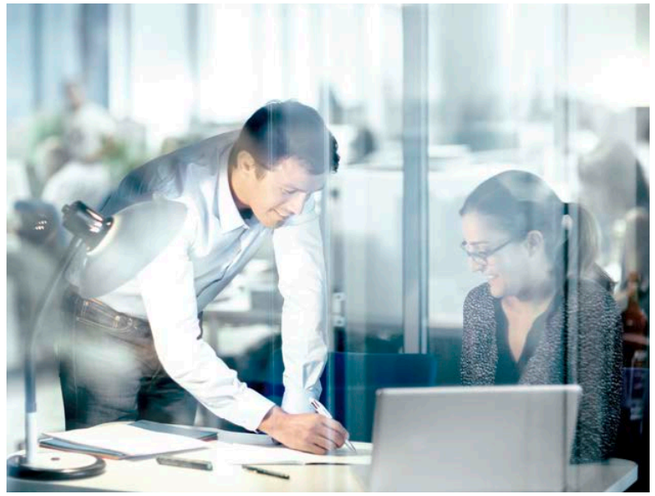
André Herlicq
Member of the Supervisory Board

"As an independent director, I have observed that trust is one of CNIM's strong values, supported by employees and managers alike. It is also strongly rooted in relationships with clients and partners."

Sigrid Duhamel,
Independent member
of the Supervisory Board

A committed group

CNIM's first asset is the men and women who make up its teams and the talents who will join them tomorrow. CNIM is committed to helping them discover the variety of its professions, promoting the development of their skills and encouraging internal mobility.



FOCUS ON INTERNAL MOBILITY

Providing a framework, principles and rules for mobility within CNIM: these are the main principles of the Group Mobility Charter. These principles notably include the internal posting of job vacancies as a priority in order to promote employee mobility and the implementation of a Mobility Committee, which is attended by the HR managers every two months. This Committee works proactively on employee mobility to support their professional careers. As a result of its development, the Group also offers an increasing number of opportunities for international mobility. These can take the form of assignments, secondments, relocations or even VIE* (French International Volunteers in Business) missions. In total, there were 105 in-house career opportunities between Group companies in 2018. CNIM aims to achieve an internal mobility** rate of 30% by 2023.

FIRST EDITION OF THE CNIM DAY

At the beginning of July 2018, from Baku to La Seyne-sur-Mer via Chennai and London, the Group's 2,613 employees signed up for a live webinar at the invitation of CNIM's Executive Board members. The goal was to share the Group's project, its ambition and its strategy. On this occasion, employees formulated 70 questions on subjects as varied as business activity, CNIM's international development and the strengthening of intra-Group synergies.
CNIM Day is to be a repeat event to ensure that all Group employees have a collective, shared vision of the Group project's progress.

FOCUS ON THE SKILLS APPROACH

The objective of the skills approach implemented at CNIM is to develop skills in line with the Group's future needs and strategic orientations.
Benchmarks were developed for all the Group's business lines and were used for the annual appraisal interviews. The HR teams now have an integrated tool at their disposal to manage the assessment, training and development of employee skills, as well as to anticipate changes in the business lines and workforce and to support mobility. In addition to this approach and with a view to identifying, supporting and developing talent, a talent review is conducted each year.

MEETING STUDENTS AND FUTURE GRADUATES

In order to support the Group's growth and attract new talent, CNIM's Human Resources Department has set up the Campus Management programme. In this context, CNIM took part in 11 job fairs and school forums in 2018. These actions target junior technical, scientific or management profiles. Thanks to its historical roots in La Seyne-sur-Mer, the Group maintains close relationships with local vocational training and higher education stakeholders. The ambition for 2019 is to develop the Group's employer brand among a wider audience, particularly via employee ambassadors.

* VIE: Volontariat International en Entreprise.
** Percentage of positions filled by internal mobility.

Environment & Energy

Key issues facing CNIM's clients are how to optimize resource management, manage the energy transition and reduce the environmental footprint of human activities. To help address these challenges, the Group offers innovative, customized solutions ensuring optimal durability and security in the areas of waste treatment, emissions control, renewable energies and the energy efficiency of industrial sites.

As an international specialist in the treatment and energy recovery of waste, CNIM works with local authorities, organizations with delegated authority from central state bodies and operators. Its teams design, build and operate turnkey plants that produce energy from biomass, household waste, non-hazardous industrial or special waste (medical waste, water treatment plant sludge and green algae). CNIM works with its clients during every phase of their project, whether they are seeking recommendations on the type of facility best suited to their needs or want specific equipment. Advice can include the definition of legal, fiscal and technological needs, the search for financial and technical partners, environmental impact studies, building permit requests, coordination with public authorities or civil society, acquisition of interests in the facilities, etc. In operating waste-to-energy and biomass-to-energy plants built by it or other equipment suppliers, CNIM brings in a range of technologies designed to reduce operating costs. This activity has recently been extended to other business units such as waste sorting and recycling, organic waste recovery and renewable energies.

CNIM also offers a wide range of services for improving the competitiveness of existing waste treatment plants through optimization, maintenance, refurbishment and compliance work. Its CNIM Environment & Energy Services entity coordinates the Environment and Energy Sector's expertise in the market for heat engineering services for combustion facilities in operation. It aims to become a key player in the energy transition and energy efficiency market.

Its LAB subsidiary has a catalogue of patented processes and flue gas treatment services for waste treatment plants, thermal power plants, industrial facilities and ships. LAB can also help recover metals in bottom ash from waste incineration. SUNCNIM, a subsidiary set up in 2015 in partnership with Bpifrance, develops and operates turnkey solar steam generators and solar power plants with storage. Its business offering is backed by the energy management system (EMS) developed by the Bertin subsidiary, the provision of performance guarantees adapted to project financing requirements, and its experience in building turnkey power generation plants.

With LAB and Bertin Energy & Environment, CNIM also provides energy producers and consumers with innovative energy storage, management and recovery solutions to optimize their performances and remain competitive.

CLIENTS

Energy producers, local authorities, industries of all types, especially chemicals, petrochemicals, agri-foods, paper manufacturing, pharmaceuticals, plant operators and major service providers.

KEY FIGURES

170
turnkey waste-to-energy plants
processing the waste produced by **more than 100 million people** worldwide.

CNIM operates nine waste-to-energy facilities
(including one multi-process plant comprising an organic waste-to-energy centre with algae sorting processing facility, and a landfill centre), a sorting centre, a waste disposal facility, a plant for the recovery of metals from clinker, and two biomass-fuelled power plants.

1/3
Greenhouse gas emissions in the waste treatment sector have been reduced by a factor of 3 in 15 years in the United Kingdom thanks to waste-to-energy plants.

90%
The availability rate of plants operated by CNIM.

SINCE 1953, LAB HAS HAD
> 450
customer references in more than 20 countries.

50
football fields
That's the area covered by the Llo concentrated solar power plant.

From 2019, the new Syctom sorting centre in Paris's 17th arrondissement
– designed, built and operated by CNIM – will prepare the waste of nearly one million Parisians and residents of neighbouring municipalities for recycling.

Innovation & Systems sector

The Innovation & Systems sector covers the entire life cycle of high-tech equipment and systems in the fields of defense and security, the nuclear sector, large scientific instruments and industry (including the naval, space, life sciences and energy sectors). Its technology-focused offering covers R&D, design, manufacturing, installation, commissioning and maintenance.

The Industrial Systems Sector designs and supplies equipment and systems for deterrence (launch systems for missile launch tubes on French nuclear submarines), armed forces protection and projection on land and sea, the nuclear sector and industry. Its bridging systems (motorized floating bridges and modular assault bridges) and catamaran-type landing craft can be used to provide logistic support for populations affected by natural disasters. CNIM is involved in all aspects of the nuclear industry, from fuel enrichment and nuclear generated electricity through to dismantling and waste treatment.

In the field of Large Scientific Instruments, CNIM's developments are centred on projects to develop or modernize large scientific facilities in the areas of astronomy, material physics and energy. The Group is a top-tier, long-term partner in major programmes such as the Megajoule Laser, the ITER experimental reactor and the Jules Horowitz reactor.

In its workshops, CNIM manufactures bespoke equipment comprising complex fabricated assemblies and parts requiring large-scale, high-precision machining for small and medium-sized enterprises as well as large accounts. CNIM is also pursuing its diversification in composites. Feedback from manufacturing processes is harnessed to optimize progress at design and engineering phases. This link between design and production gives the Group a clear competitive edge.

Bertin Technologies, a CNIM Group company, relies on its long history of innovation to develop, produce and market cutting-edge and instruments worldwide. Its Systems & Instrumentation Business Unit supplies equipment, systems and services for critical applications in the fields of defense and security, the nuclear industry and radiation protection, space, large scientific instruments, life sciences and medical waste management. Bertin is also active in the field of information technologies. The advanced software solutions developed by its Bertin IT subsidiary cater to the requirements of the cybersecurity, cyber intelligence and speech processing sectors. Bertin Energy & Environment covers the whole range of business's energy needs, from the design and technological development to the turnkey production of energy performance, off-grid energy and smart energy solutions.

In addition to client bases that overlap by 70%, CNIM and Bertin share the same multidisciplinary approach and have complementary businesses and expertise. They are extracting more synergies between their sales and technical teams as the Innovation & Systems Sector ramps up exports.

CLIENTS

Major French and international clients in the defense and security, naval, space and large scientific instruments, nuclear, energy, environment and life sciences sectors.

KEY FIGURES

5,000

metres of PFM motorized floating bridge
currently in service with French, Swiss, Italian and Malayan armed forces.

THE MEGAJOULE LASER* (LMJ)

is designed to deliver more than one million joules of light energy onto a target with a diameter of 2 mm in a few billionths of a second.

*The Megajoule Laser is used to study, on a very small scale, the extreme conditions occurring during the operation of nuclear weapons.

OCEANWINGS®

offers energy savings of between 18% and 42% depending on the vessel.

CNIM has built
and tested more than 250 missile launch systems and installed them on ballistic nuclear submarines.

Management structures
as at 31 May 2019

ENVIRONMENT & ENERGY

Stanislas Ancel
Chief Executive

Claude Boutin
François Darpas
Klaus-Guenther Zink
Deputy Chief Executives

DIRECTORS

Marketing, Sales & Development

Emmanuel Colombier
Director

EPC

Claude Boutin
Director

CNIM MARTIN Pvt. Ltd.

Denis Bauer
Michel Banderly
Directors

Operation & Maintenance

Bernard Joly
Director

Services

François Darpas
Director

LAB

Stanislas Ancel
Chairman of the Board of Directors
Richard Budin
Director

LAB Geodur

Björn Warmerdam
Director

SUNCNIM

Stanislas Ancel
Chairman
Sylvain Legrand
Director

INNOVATION & SYSTEMS

Philippe Demigné
Chief Executive

INDUSTRIAL SYSTEMS DIVISION

(CNIM Industrial Systems Business Unit and China and Singapore subsidiaries)

Philippe Lazare
Chief Executive
Site Manager, La Seyne-sur-Mer (France)

CNIM Industrial Systems Business Unit

Defense, Space and Maritime Business Line
Xavier Montazel
Director

Nuclear & Big Science & Thermal Systems Business Line
François-Xavier Catelan
Director

Industrial Solutions Business Line
Jean-Luc Chauveau
Director

BERTIN DIVISION

Bertin Technologies

Philippe Demigné
Chairman
Véronique Moineville
Deputy Chief Executive and General Secretary
Jean Roch
Bruno Vallayer
Deputy Chief Executives

Systems & Instrumentation Business Unit

Bruno Vallayer
Jean Roch
Deputy Chief Executives

Defense & Security Business Line
Yves Gueyffier
Director

Nuclear & Health Physics Business Line
Christophe Oudot
Director

Life Sciences Business Line
Antonin Duval
Director

Space & Big Science Business Line
Franck Fervel
Director

Medical Waste Business Line
Boguslaw Lorecki
Director

Energy Environment Business Unit

Germain Gouranton
Director

Bertin IT subsidiary (Information Technologies)

Yves Rochereau
Chief Executive
Olivier Jolland
Operations Manager

Design and production: BÂBEL **Photo credits:** Mathieu Venot + GettyImages; p. 01 David Despau; P.03: David Despau; P.04: David Despau - iStock/anyaberkut; P.05: GettyImages - iStock; P.06: David Despau/© Kréaction/Les Ateliers Monique Labbé; P.07: Iter Organization; P.09: GettyImages/Julien Goldstein – CNIM – Getty Images/Tegra Stone Nuess/Dave and Les Jacobs/Blend Images; P.10: GettyImages/Anders Tukler/Imants Urtans – iStock /Rafal Baranowski/Energy Observer; P.12: GettyImages/CNIM/iStock/matejmo – ADJ Jean-Raphaël DRAHI – Alexandre Dalivoust – CEA – Bertin; P.14-15: GettyImages; P.18: Akuo Energy/Energy Observer/Gilles Perbal; P.19: LAB – CNIM; P.21: Architrav/CNIM; P.22: ØRSTED – Herning (Denmark); P.23: iStock/Andres Balcazar; P.24-25: GettyImages/Osian Rees; P.28: © Jeyhun Abdulla/OXUSphoto.com-Azerphoto.com; P.29: Gilles Perbal/Mathieu Castelain-Vili; P.35: Cyril Abad; P.36: Julien Goldstein/GettyImages; P.38: Gilles Perbal.
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Paris Trade and Companies Register B662 043 595
SIRET 662 043 595 00138