

“We’ve never been

intimated by major industrial challenges.

”

CNIM has a very broad scope, with operations and expertise in a variety of fields. How would you describe the Group in a few words?

Nicolas Dmitrieff. Summing up CNIM is not an easy task, given that we’ve been around for 160 years. An outsider could see the Group as a conglomerate with different businesses that have no clear ties between them. But the truth is that our business portfolio is extremely coherent. This becomes clear if we look back at the Group’s history. CNIM was founded as the result of a decree issued by Napoleon III, under the Second Empire, between the industrial revolutions. Its workshops in La Seyne-sur-Mer filled orders from the State to build first armored frigates, then submarines and tanks. Three fundamental skills were mastered during the shipyard days: thermal engineering, mechanical engineering and industrial contracting. These three areas of expertise are still the Group’s



MANUFACTURE
OF RADIAL PLATES
FOR THE ITER
PROJECT AT
LA SEYNE-SUR-MER.



DNA, the core areas around which it constantly reinvents itself. There's also a fine tradition of audacity at CNIM, reflecting the fact that while our relatively small size forces us to be savvy and resourceful, we're also capable of taking very big steps. In several of our businesses, we either partner with or compete head-on against very large corporations to win major contracts, notably outside France. In more than a century and a half, we've never been intimidated by major industrial challenges.

"Some very big orders were booked in 2016. We also continued to expand our business portfolio and now have a number of new products and projects under development."

How do you explain the Group's solidity over such a long period?

N.D.: CNIM is a family-owned firm with a history that spans several generations. It has a stable and committed shareholder base, which benefits both its employees and clients. We make decisions quickly: there is genuine proximity between management and employees. From a legal standpoint, CNIM is a public limited liability company (*société anonyme*), but in reality we are anything but anonymous: the company is represented by a Chairman, a family, a Management Committee and every one of its employees. This representation guarantees solidity, staying power and stability. We will never use a scorched earth

policy – it would not be in our interest to do so. All of our efforts are geared to supporting, perpetuating and building the Group. And our teams have total confidence in us.

Let's talk about the past year: How were the Group's 2016 results?

N.D.: The results were in line with the business plan we've been sticking to for several years. We met our profitability targets. Stripping out Babcock Wanson, the subsidiary we recently sold, revenues decreased slightly, as anticipated: we are currently in the process of rebuilding our order book. It should also be noted that some very big orders were booked in 2016, totaling €800 million, well above the 2015 level. At the same time, we continued to expand our business portfolio and now have under development a number of products and projects that will require further investments: operation of the Llo solar energy power plant (SUNCNIM, see p. 28), treatment of flue gas emissions from ships and bottom ash (LAB, see p. 32), instrumentation and cybersecurity (Bertin).

So, results were in line with your forecasts... What were the main highlights?

N.D.: There were several key highlights, at different levels. In terms of business, we landed two large contracts for turnkey waste-to-energy plants in the UK, in Kemsley, North Wales. In France, CNIM developed a third of the plants of this type between 1970 and 1990, and there are currently few opportunities to build new ones. However, plant renovation contracts, which the market has been

70

radial plates are made by the CNIM-SIMIC consortium for the ITER reactor.

3,000

square meters of space for the manufacturing floor built specifically for this project at the CNIM site in La Seyne-sur-Mer.





139

patent families.

anticipating for some time, are starting to appear – this is a trend that will continue in the coming years. CNIM notably landed two new contracts in Thiverval-Grignon, in the Yvelines department, and in Saint-Saulve, in the Nord department. Another highlight of 2016 was the return to our historical headquarters after more than two and

“Our areas of focus are aligned with our clients’ key sovereignty issues.”

a half years of renovation work. Our Paris-based teams had been working at two separate sites but are now back in the same building. This beautiful site was originally a private mansion, and we redesigned it to create a friendly environment that represents the CNIM spirit to all those who enter the building, be they employees or clients. Since our 2,500 staff are spread out across numerous sites throughout France and abroad, we want to make this the Group’s flagship, a place where they want to come to see one another and work together. The last highlight of 2016 I would mention is the sale of our subsidiary Babcock Wanson, which makes industrial boilers.

On that subject, why did you sell a subsidiary that is expanding?

N.D.: That wasn’t always the case: in 2007, the company was in trouble. We were able to turn it around starting in 2010. By 2015, it was in a good shape: with a solid product-service strategy and a strong management team, it needed more funding to become the European leader in its



“The CNIM Group has traditionally maintained high levels of liquidity with a positive net cash position and a significant line of credit as a backup.”

This tradition, in place for more than 30 years, was unchanged as of December 31, 2016, when the Group had gross cash of €183.7 million and an available, undrawn medium-term borrowing facility of €120 million. In other words, the Group has the resources it needs to plan its future development serenely.

CHRISTOPHE FAVRELLE,
Chief Financial Officer

market. It also had a unique position within the Group, offering relatively few synergies with our other businesses. I wanted it to have the resources it needed to continue to expand. We had to make trade-offs, choose our investments, select the businesses around which we wanted to continue to develop CNIM. Babcock Wanson was not a priority, but putting it on standby wasn’t an option either. I had seen the danger of this type of attitude firsthand: when I took over the reins at CNIM in 2009, our Transport Division was going through a rough patch since it lacked the resources it needed to grow. We had to sell it under difficult terms that did not guarantee its continuity. I learned many things from that experience, and did not want Babcock Wanson to go down that same path. We thus worked with its executives to select, among several suitors, the one that would be best for the company’s future growth. I would point out that we did not sell to the highest bidder, but rather to the one that had a bona fide plan for Babcock Wanson.



CNIM is an international firm with a
2,500
strong workforce
throughout the world.





24 WASTE

TREATMENT AND BIOMASS PLANTS
DELIVERED BY CNIM SINCE 2012*

Energy recovery facility
in Oxford (United Kingdom).
Completed by CNIM
in November 2014.



* Number of turnkey waste-to-energy or biomass plants and materials recovery facilities (sorting and composting) delivered by CNIM or under construction during the period. Interventions on existing units and the construction of flue gas treatment facilities by subsidiary LAB are not included here.



“The energy transition is creating a range of opportunities.”

In other words, the decision reflected your personal approach, not just financial factors?

N.D.: That’s exactly right. I make sure my decisions will not have any negative long-term consequences for the Group or its subsidiaries, and I am free to take them with the approval of the Supervisory Board. When I took over the helm at CNIM, I fought to regain control of the shareholder base. Today, it is majority-owned by our family. This gives us the freedom to make our own decisions. The industrial sector requires long-term investments that only produce their full effect after several years: one must know how to be patient. Many executives today find themselves in a tough situation because they focus on short-term thinking and immediate results. Being family-owned, CNIM can develop projects with staying power.

After selling that business in 2016, is the plan to grow through acquisitions, or purely organically in 2017?

N.D.: It will be a mix of both. We always look at acquisitions that could help us build our core businesses by adding new expertise or filling in or expanding our offering in technology or geographical terms. But CNIM is not after size or volumes at any cost. We want to see our revenues increase on the back of organic growth combined with synergies unleashed with new entities. In a word, CNIM's aim is for enhanced solidity and credibility.

How do you plan to secure the Group’s growth going forward?

N.D.: Our areas of focus are aligned with our clients’ key sovereignty issues, whether they relate to the energy transition, the security of States and individuals, or high technologies. All of our key product and service offerings tie in with these core themes. When it comes to the security of States and individuals, we will continue to focus on organic growth driven by our flagship products in the fields of land and maritime projection systems as



“The often audacious solutions CNIM proposes to its clients are backed by innovation and industrial soundness.”

CNIM has real expertise in research and development, combined with top-quality industrial capabilities. The ability to integrate all this multidisciplinary expertise allows the Group to take a pragmatic approach to innovation, whether it is executing projects for clients or developing its own products.

PHILIPPE DEMIGNÉ,
Chief Executive CNIM Innovation & Systems

well as detection and surveillance equipment. As for the energy transition, our aim is to continue to expand our offering and structure it in such a way as to considerably grow our revenues outside Europe over the coming years. This international expansion will create an even more solid springboard for our growth. The world is more complex than ever, and subject to cycles. Our diversified business mix has allowed us to withstand swings since our activities are countercyclical. Our job now is to achieve the same diversification in geographic terms, so that CNIM can continue to weather cyclical downturns. The Group is also working constantly to develop businesses that generate recurring revenue: operation, maintenance and services in energy industries and the sale of defense and security equipment produced in small and medium runs. Here again, the focus is on countercyclical businesses, since recurring revenue creates a balance and complements the large contracts we win.

Running a company requires making investment choices, notably in terms of technology. What choices are you making?

N.D.: Our thermal and mechanical technologies and expertise are proven. Our goal now is to find new applications for them in different areas in order to expand our offering and build on it in a more comprehensive, integrated way. This will allow us to extract more value from our existing expertise, whether in waste treatment, a field in which we are leaders, or in areas such as biomass, solar, flue gas treatment or emissions control.

The energy market is evolving fast. Some



preparing



166

Waste-to-energy plants built by CNIM across the world, i.e.:

285

lines.

fundamental trends are taking shape: decentralization - with the construction of smaller energy generation units – as well as decarbonization, reduced energy intensity, heat recovery, digitization of systems used, etc. The energy transition is creating a range of opportunities. For instance, CNIM is developing a new concept in maintenance vessels for offshore wind farms, WindKeeper®. We are working to design a vessel that is smaller and more efficient but able to withstand rough seas. We are also on the cutting edge of ash metal recovery plants, with progress in this area concen-



“As Europe’s leading builder of turnkey waste-to-energy plants, CNIM has a deep understanding of the technologies underlying the processes involved.”

As a provider of turnkey facilities, the Group interacts with all stakeholders’ projects and guarantees the energy performances of its plants. The control it has over projects gives it the credibility to offer a range of tailored operations and refurbishment services.

STANISLAS ANCEL,
Chief Executive CNIM Environment & Energy

“CNIM is deploying its hubs in four areas: the United States, the Middle East, Southeast Asia and China.”

trated primarily in the North American market. I would also mention our expertise in Energy Management Systems, through our subsidiary Bertin Technologies.

Can you explain the role of integrated business models (Build, Own, Operate) in the environmental and energy industries?

N.D.: We use these models with the aim of building our services and operations businesses. CNIM built the first waste-to-energy facilities in France, but let others operate them. In other words, we handled the phase that involves the most risk. Indeed, building a waste processing plant is a complex process. Our ability to deliver these turnkey facilities gave us credibility to operate them. So we were able to reach agreements with developers to manage the projects jointly, starting with

the construction phase, to maximize our contribution every step of the way. The next move for CNIM is to continue to expand its presence across the entire value chain, from facility design through to operation. Because our expertise in construction and operation is complementary, we can meet all of our clients’ needs. We notably offer services relating to maintenance and the refurbishment of thermal power equipment, increasingly with a digital component, particularly for remote energy performance monitoring. In Europe, we continue to respond to requests for proposals in partnership with the major developers unless the end client specifies otherwise. But we have no reason to take this approach on international markets.



WASTE-TO-ENERGY PLANT IN TURIN, ITALY, BUILT BY CNIM.



“International expansion will create new challenges for the CNIM Group.”

In particular, efforts to manage the risks resulting from moves into new geographic areas as well as the increasing complexity of our projects are central to our activities and an integral part of our decision-making process. Risk management enhances the Group’s performances.

ÉRIC CHADÉNIER,
Group General Counsel, Corporate Purchasing & CSR

Depending on the location and who we are dealing with, our partnerships can take on very different forms.

We have spoken a great deal about energy and the environment. How do you see your offering evolving in other businesses?

N.D.: In defense and security, we are working on sensor-based detection and protection systems. CNIM offers a range of CBRN⁽¹⁾ risk detection equipment solutions for military and civilian uses, as well as special craft with high-potential

equipment for independent amphibious missions, including the L CAT® (see p. 37), a catamaran with a mobile platform. We are also very active in mechanics, working on such major research programs as ITER (see p. 34), the global research project aiming to develop a nuclear fusion reactor. The stakes are very high: ITER aims to make it possible to produce green nuclear energy for generations to come. We are currently building and assembling major components at the ITER site in Cadarache. CNIM is one of the key industrial players in this international program bringing together China, the European Union, India, Japan, Korea, Russia and the United States.



(1) CBRN: chemical, biological, radiological and nuclear.

for the future

You spoke earlier about the need for geographic diversification. Do you have priorities when it comes to international expansion?

N.D.: Yes, our focus will be primarily on the Middle East, Asia and the United States. We already have strong positions in France and Europe. Our aim is to continue to support our businesses there while also developing value-added services in the environmental and energy sectors. Our Asian activities will be ramped up gradually, but things could take

"CNIM's engineering culture is excellent in terms of expertise: it allows us to master all the technical aspects of every project."

off quite quickly in the Middle East: five years from now, we could be generating a large share of our revenues there. This region is likely to become our second largest market soon.

What will you be doing to make this international expansion successful?

N.D.: CNIM wants to go from being an exporter to an international group by setting up hubs, under its own name, which will promote all of the Group's products and services in each major geographic area. But CNIM is a French company, a European one: our central design offices and key expertise will still be based in France. In countries where we build and develop waste-to-energy facilities, we partner with local companies for everything that can be done on-site, thus preserving the existing ecosystem. The hubs CNIM is deploying outside the euro area are concentrated in four areas: the United States, the Middle East, Southeast Asia and China (Gaoming). Our operations in the United States focus on fly ash treatment and defense-related instrumentation systems, nuclear and life sciences. Our

Middle East hub set up an Abu Dhabi office in 2016. It is tasked with promoting our environmental, defense and security products and services (Bertin contract for gas detection systems, for instance) and energy transition offering (solar, thermal and petrochemical optimization). Our Southeast Asian activities are grouped together in Singapore to support our defense offering and the distribution of NRBC products for Bertin Technologies. We are also working on waste-to-energy and biomass facilities in the area.

These changes must require specific kinds of support for the Group's human resources?

N.D.: Human resources are indeed a key issue for the Group, and we've been encouraging our employees' growth for several years now. For sector-related and historical reasons, CNIM has traditionally had an engineering culture, and our most senior employees have a very strong sense of belonging. When the French shipbuilding sector was in deep trouble in the early 1980s, the State wanted to combine these activities within a single publicly-owned entity, NORMED (Chantiers du Nord et de la Méditerranée). CNIM was almost merged into it, but my father, who in the meantime had begun to develop the land-based activities, fought to keep it alive. Just 10% of CNIM staff at the time followed him down this entrepreneurial path. This was when CNIM acquired its true spirit, based on its pride in having reinvented itself. Those who were here at the time are naturally very committed and involved. But this spirit needs to become part of an institutional culture, as CNIM is expanding, hiring new people and bringing on board new talent, notably managers who did not witness this turning point. This is why the Group Human Resources Department worked extensively to bring to life the culture of CNIM – a company that is incarnate, audacious – a company that

EQUIPMENT FOR THE MEGAJOULE LASER PROGRAM MADE BY CNIM AND BERTIN TECHNOLOGIES.



TRAINING EXERCISE
BY THE FRENCH
ARMY INVOLVING THE
CONSTRUCTION
OF 160 METERS
OF MOTORIZED FLOATING
BRIDGE (PFM)
ON THE RHÔNE.



“At CNIM, continuous education is a core part of our strategy insofar as employees are the ones driving the Group’s transformation on a day-to-day basis.”

The Group has a program for employee support and training, conducted with individuals or groups and based on a participatory approach, to help CNIM tackle the challenges that lie ahead: international expansion, development of and steady improvements to our products and services and further innovation. Its goal: to develop a culture of collective intelligence.

FRANÇOIS DARPAS,
Human Resources, Information Systems
and Communication Director

creates new things and takes risks. In addition to existing internal training courses focusing on technical skills, we are helping all of our managers understand this Group spirit, offering each of them a customized path to follow. CNIM’s engineering culture is excellent in terms of expertise: it allows us to master all the technical aspects of every project, even the most complex ones, from end to end. But it can be a disadvantage when our highly specialized employees know little about other aspects of the business, particularly marketing, sales and management. We are working to help everyone understand these other aspects.

International expansion will make your working methods even less compartmentalized. Will this have an impact on digital security?

N.D.: This is a complex issue. The Group is expanding internationally, and exchanges between different continents need to be smooth. CNIM has been using shared databases and



videoconferencing systems for a very long time, with a high level of security; working in different industries, including defense, we pay very close attention to IT security. But we have to find the right balance between extreme data security and ease of access for users. People could seek ways to go around a system if it’s too restrictive, essentially making it ineffective. This subject is more complex for our Group than others since our defense businesses require a high degree of confidentiality. For instance, access to some areas in our La Seyne-sur-Mer site is restricted; USB keys are not allowed. So our policies must be adapted to the activities of our subsidiaries and the sensitivity of the data they handle. With our major projects for example, all trade information is exchanged with a high level of security to make sure it is protected.

How is CNIM preparing for the future?

N.D.: CNIM has a long industrial and technological history that is embedded in its corporate culture and embodied by generations of engineers and technicians. Long time horizons are important at CNIM, contrary to the short-term thinking many engage in today. When I took over the reins in 2009, with the backing of the Supervisory and Management Boards, I reorganized, streamlined and stabilized the Group. I worked to make our businesses easier to understand, to clarify their product and service offerings, and to rethink our strategy. International expansion will be our next big challenge. Our totally revamped websites takes all of these changes into account. Our new head office also reflects these changes: it is more open and dynamic, featuring several meeting rooms with videoconferencing equipment, to symbolize our relations with the outside world. The transformative work we have been doing for several years now is increasingly tangible, and we will soon begin to feel its full impact.

30
minutes is all it takes to build

100
meters of motorized floating bridge.