

# YELLOW TOMORROW



**THEY MAKE  
ORANO'S FLAME  
SHINE BRIGHT**



**orano**

I'm a ~~technician~~  
*actively*  
*involved*  
in low-carbon  
energy

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Orano, the place to ~~work~~ *be!*



Join us  
on Orano Jobs

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at a glance



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# THE NUCLEAR RELAUNCH DEMANDS THAT WE RISE TO THE CHALLENGE

**Claude Imauven**  
Chairman of the Board of Directors

The return to favor of nuclear energy, evident since 2022, can be explained by several factors. First and foremost is the current geopolitics, highlighting the need for states to safeguard their energy sovereignty. Then there is the vital need to contain climate change, requiring us all to move away from fossil fuels to accelerate the decarbonation of energy production. In addition, it is a duty to provide populations with reliable, abundant, and competitive electricity, and demand is set to double between now and 2050.

This being the global context, several world organizations are recommending significant increases in nuclear capacity over the next three decades. This is the case for instance of the International Atomic Energy Agency (IAEA), and notably of the COP28, the 28th Conference of the Parties to the UN Framework Convention on Climate Change, which has called for a tripling of the production of nuclear energy as a source of low-carbon electricity.

Numerous countries have already stated they will restart or extend existing reactors, build new reactors, or develop small modular reactors (SMRs) and advanced reactors (AMRs). In France, the plan to revitalize the nuclear industry has been confirmed, involving all players in the sector and calling on us to address major industrial challenges.

It is up to us to rise to these challenges! Orano is present across the entire nuclear fuel value chain and is supporting the mobilization of the global industry. Our contribution to making nuclear energy a resource for today and tomorrow is very clear.



**“IT’S THROUGH  
OUR TEAM SPIRIT  
AND TEAM COHESION  
THAT WE WILL WIN OUT”**

**NICOLAS  
MAES**

**CEO  
of Orano**

Appointed CEO in November 2023, Nicolas Maes joined the group in 2011, which became Orano in 2018. The new team captain looks back at projects that, in his eyes, illustrate the group’s priorities in an industry undergoing major renewal.

**INDUSTRIAL PERFORMANCE**

Industrial performance conditions our ability to deliver on our commitments to our current customers and our future growth strategy. By revisiting our processes, perfecting the control of our plants and projects, and leveraging digitalization and AI, we are strengthening the robustness and efficiency of our industrial model. The success of this approach rests on the commitment of each Orano employee and that of our industrial partners. This key area is addressed by the Opteam 26 plan, which we are rolling out in 2024.

**NUCLEAR, INDUSTRIAL,  
AND OCCUPATIONAL SAFETY**

We have a constant focus on developing the long-term nuclear safety and control of our facilities. The principal areas we are working on notably involve anchoring a leadership culture around nuclear safety, industrial safety, occupational safety, radiation protection, and preserving the environment. We must strive to reach the same level of prevention and high standards for our employees and subcontractors, everywhere in the world.

**NEW DEVELOPMENTS**

We are embarking on a phase of strong development with the implementation of our projects in our core businesses and in new sectors. These include extending the Georges Besse 2 enrichment plant, projects to renew our mining capacities, the launch of the TN Eagle Factory for nuclear casks, and the ramping up of production at the Jean Fourniols Stable Isotopes Laboratory. In addition, certain new projects are also turning into growth drivers. Until recently in their research and development phases, these successes underline our capacity for innovation. Orano Med has launched the construction of the first two laboratories dedicated to targeted alpha therapy drugs for cancer treatment. Meanwhile the program for recycling electric vehicle battery materials has just entered its industrial design phase.

**FUEL PROCESSING-RECYCLING**

The sustainable resurgence of nuclear energy can only be achieved by mastering the back end of the cycle, which combines the processing and full recycling of materials. Through Orano, France has been able to develop world-class excellence in processing-recycling over a period approaching six decades. The strategy has recently been confirmed at state-level in France for the period extending well beyond 2040, and this calls for significant investment in our Orano La Hague site. With our partners, we will define the necessary industrial assets to recycle fuels through to the end of this century and play our part in supporting the innovative startups developing AMRs (advanced modular reactors) and SMRs (small modular reactors).

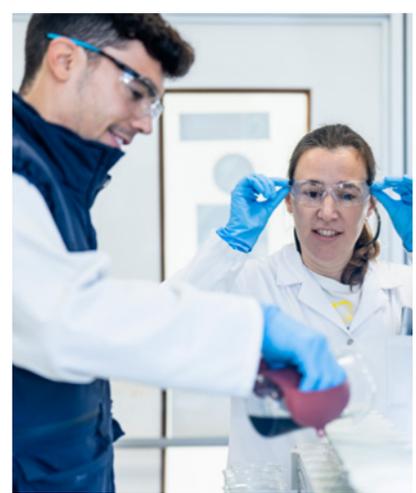
**GROUP ATTRACTIVENESS**

Orano is working with all the players in the sector to bring together and build up the necessary know-how to meet the strong demand for energy production coming down the line with the nuclear revitalization plan. We need to attract close to 2,000 new permanent employees per year, retain our talents, and adapt our skills to the company’s needs. This very ambitious endeavor is key to our success because it is our -today - 17,500 employees who will be the driving force behind the deployment of our roadmap, working collectively with the team spirit and cohesion that we need to have to overcome challenges and harness our opportunities.

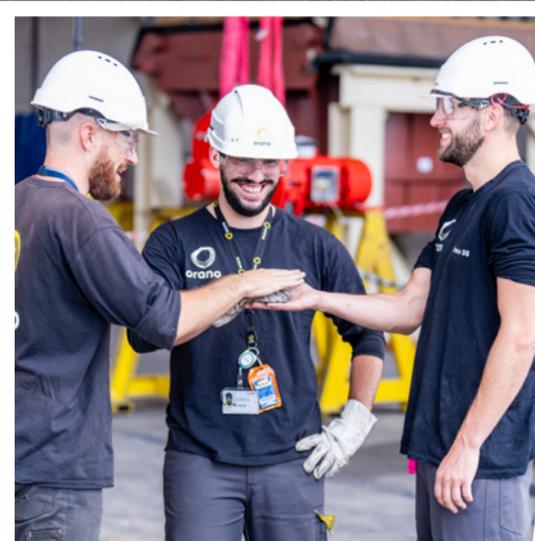
**ORANO IN SOCIETY**

Our expertise in transforming, recovering and adding value to nuclear materials makes Orano a unique player at the heart of today’s key challenges: climate, energy sovereignty, and efficient use of resources, whether natural uranium or other critical strategic materials. We are proud to be able to offer solutions for today’s and tomorrow’s world, in energy and beyond, in new areas calling for our industrial know-how, skills and cutting-edge technologies. Our business model is rooted in society. It carries the meaning and human values that underpin our company’s purpose.

# PROUD OF ORANO'S DELEGATION!



At the heart of the action at Orano Malvési, where the properties of uranium hold no secrets for our analysis lab team!



Team-building exercise for our Dismantling & Services teams in the field



Nicolas Maes, Chief Executive Officer, meeting with the teams of the Orano Tricastin site



Debriefing after a day's work at the Djengeldi uranium deposit mining site, Uzbekistan

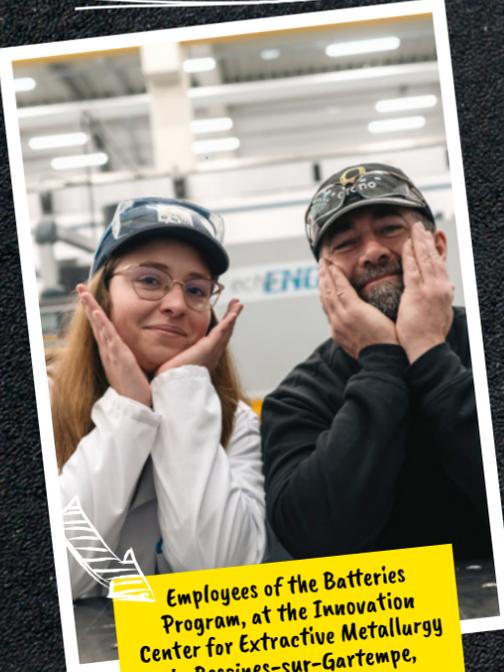


When team spirit and technical expertise come together at Orano Melox, the Mox fuel fabrication plant



Team changeover at Orano la Hague: a special time for camaraderie between operators

Team spirit dominates at the Beaumont Research Center, where process performance and innovation are part of daily operations



Employees of the Batteries Program, at the Innovation Center for Extractive Metallurgy in Bessines-sur-Gartempe, taking a break

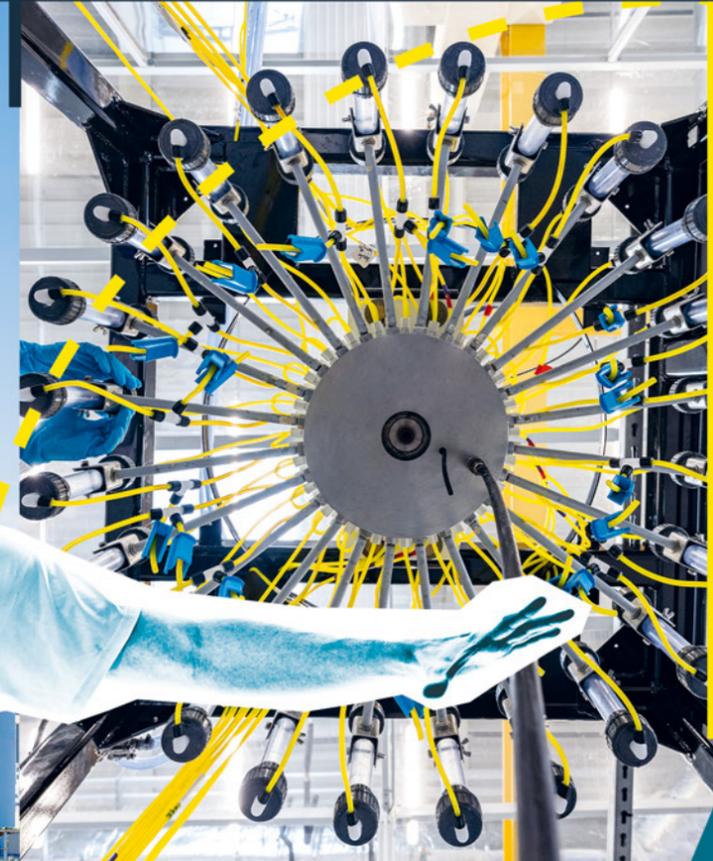
Debriefing around the TN Eagle, the new-generation nuclear cask. Caution, brains storming!



Orano's Delivery Staff at Châtillon and all of the support roles, always ready to meet the group's challenges!



Orano Med teams in Dallas in action producing lead-212 for cancer research



# NUCLEAR ENERGY STEPS UP

Faced with energy and climate crises, countries around the world are looking to low-carbon energy for energy security. This is the promise of nuclear power, which has been making a huge comeback since 2022. A number of governments have stated they are restarting existing reactors, extending service lives and launching new builds, including high power and small modular reactors. Like COP28, several global organizations are calling for a tripling of nuclear capacity by 2050. The challenge? To meet double the demand for electricity while maintaining the carbon neutrality goal.

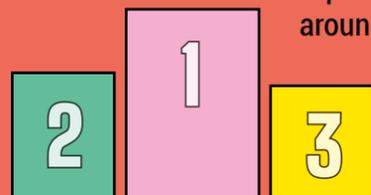


# NUCLEAR PODIUMS!

Review of current events, reports, global conferences, and political decisions that underscore the nuclear renewal everywhere in the world.

## COP 28: X3 for nuclear energy!

The 28th international conference on climate challenges, which was held at the end of 2023 in Dubai, called for tripling nuclear energy capacities installed around the world by 2050 to benefit from low-carbon electricity.



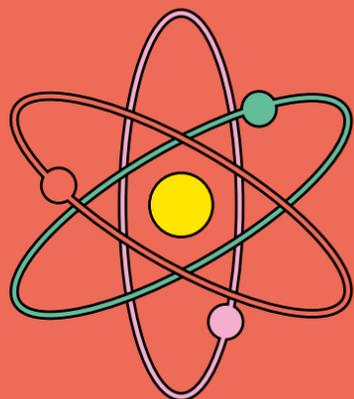
**“For the 2050 scenario, IAEA\* foresees nuclear installed capacity doubling, reaching 890 GW as compared to 370 GW in 2023”**

\* International Atomic Energy Agency

## 58 reactors under construction worldwide

83 Number of innovative small modular reactors under development

x2 Global studies predicting that electric demand will double by 2050



## LOW-CARBON ELECTRICITY

According to the International Energy Agency (IEA), to reach carbon neutrality by 2050, low-carbon electricity production must be multiplied by six

## THEY'RE VOTING NUCLEAR!

A worldwide review of countries that are renewing or accelerating their nuclear programs.



### EUROPEAN UNION

In May 2023, 15 European countries joined the "Nuclear Alliance," which announced an objective of 150 GW of nuclear electricity by 2050, meaning 30 to 45 new reactors.

### CHINA

China has the greatest number of reactors under construction (24) and by 2030 should become the world leader in installed nuclear capacity.

### UNITED STATES

Having the leading nuclear fleet in the world with its 96 reactors, the United States wants to increase its installed nuclear capacity to 300 GWe by 2050 (93 GWe in 2023), by building mainly SMRs.

### UNITED KINGDOM

The British government wants to triple its installed nuclear capacity by 2050 as part of an energy security strategy aimed at 24 GW capacity by 2050.

## FRANCE: NUCLEAR ENERGY RENEWAL PLAN IN FIGURES

Building six EPR2 by 2035



Extending the service life of existing reactors up to 50 years

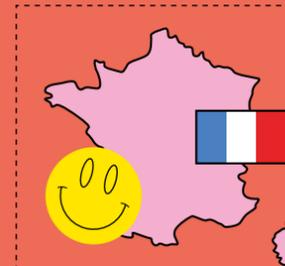
Investments of around 1 billion euros by 2030 for developing small innovative reactors



Elimination of the 50% limit on the proportion of nuclear energy in the energy mix by 2035



Design studies for eight additional reactors



For 57% of French people, nuclear power is an asset for the country.

BVA/Orano Survey – June 2023

### JAPAN

The country is predicting 20 to 40 new reactors by 2050.

### INDIA

The country has announced construction of 20 new reactors by 2030.

### BELGIUM

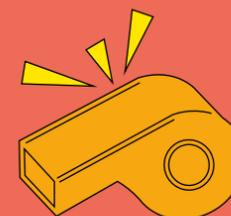
The government has decided to extend two reactors for 10 years.

### EUROPE

The Netherlands, Poland, Czech Republic, and Sweden have announced the construction of new reactors.

### CANADA

The country is banking on building small reactors for isolated sites as well as pursuing large reactor programs.



## A new generation of innovative reactors

The nuclear industry is seeing an unprecedented wave of innovations with the development of new small reactor designs to meet growing needs for low-carbon electricity and decarbonization of various vectors (heat, hydrogen, etc.).



**“Nuclear power can accelerate and secure the transition away from fossil fuels”**

International Energy Agency (IEA)



Against the backdrop of nuclear renewal, Orano is delivering solutions for major strategic projects. These point to how key a role the group is set to play in tomorrow's nuclear industry, responding to the challenges of climate change and energy sovereignty.

### A STRATEGY FOR PROCESSING-RECYCLING BEYOND 2040

Reusable materials contained in spent fuels (uranium and plutonium, around 96% in total) are processed by Orano La Hague and can then be used by the Orano Melox plant to make recycled fuels. The significant investments for the Orano La Hague site confirm that processing-recycling is a valued center of excellence of French industry and are testimony to the know-how developed over nearly six decades in Orano plants.

### CAPACITIES FOR URANIUM ENRICHMENT EXTENDED

The project to extend the Georges Besse 2 plant at the Orano Tricastin site will increase the group's enrichment capacities by nearly 30%, or 2.5 million SWUs. Starting in 2028, this additional capacity will replace some of the procurements of Russian enriched uranium for the Western market. The uranium produced will supply the equivalent of 120 million households with low-carbon energy.

### RENEWAL OF MINING CAPACITIES

As the third largest uranium mining company in the world, Orano represents around 15% of the international uranium market with its sites in Canada, Kazakhstan, and Niger. To continue to ensure security of uranium supply, Orano is strengthening its cooperation with Uzbekistan and developing a new mining project with Mongolia. This policy of diversification enables Orano to maintain more than 20 years of resources and reserves for its customers.

YOU'LL BE  
HEARING  
LOTS  
ABOUT US

### FUELS FOR FOURTH-GENERATION REACTORS

Orano supports the development of new reactor and SMR designs and supplies fuel with the properties needed to achieve maximum safety at a competitive production cost. Orano is also working with the entire start-up ecosystem on the development of innovative solutions to reduce the quantity and lifespan of nuclear waste.

### DEVELOPING AND RECRUITING TALENT

The goal of tripling nuclear energy capacities in the world by 2050 makes it necessary to recruit and train highly qualified women and men and to win their loyalty. This is a major challenge for the sector, which will need to hire up to 100,000 people in the next 10 years! Orano wants to attract the necessary skills and talents by making around 2,000 permanent contract hires per year and by training 1,000 trainees and interns each year.

# THE FUTURE OF DEEPTECH IS BEING WRITTEN TODAY



Orano, the group with all  
the hallmarks of a **start-up**



Discover the Orano  
Venture Fund



**CAROLINE SOULIÉ**  
WORK-STUDY STUDENT ON A PROFESSIONAL CERTIFICATION PROGRAM FOR INSTALLATIONS

"Orano's investment in healthcare changed my outlook on nuclear energy. I discovered that through nuclear medicine, we are making headway in cancer treatments using lead-212. Their advantage is destroying cancer cells without damaging the surrounding healthy cells!"

**ALOÏS DERVILLE**  
STUDENT ENGINEER SPECIALIZING IN ENERGY RESOURCES

"Nuclear energy is a true asset for France. It provides large quantities of low-carbon electricity, which is essential to the ecological transition in our society and also to our energy sovereignty. Committing to nuclear energy means entering a forward-looking, highly diversified sector central to major technological and strategic challenges."



**RONAN CHAUVEL**  
STUDENT IN NUCLEAR AND ENERGY ENGINEERING

"I chose the nuclear path because this industry is a miracle of engineering with its stringent demand for reliability and safety. It's also a fascinating science that can have an enormous role to play in the transformation of society, in how we design our cities, and electric mobility. I want to be actively involved in the transformation for these reasons and because I care about the environment."



**HERLOS SILVA**  
MECHANICAL ENGINEERING STUDENT

"With the growing climate crisis due to continuous use of fossil energies such as oil, coal, and gas, the nuclear industry offers the solution by supplying low-carbon energy. It helps reduce CO<sub>2</sub> emissions while remaining a controllable energy source, capable of providing stable and reliable electricity."



# SOLUTIONS GENERATION

We are resolutely determined to join the battle for a more sustainable future. We are a generation committed to the nuclear industry and to meeting the energy, climate and societal challenges of today and tomorrow.



Julia is the leader in her facility! This is a job at the forefront of energy sovereignty and the drive for low-carbon energy.

# JULIA NOYERIES

Facility leader

**What do you like most about your job?**  
Each day is different. Despite an enrichment process that remains the same, there are always unexpected twists. I enjoy the challenge of monitoring a very rare technological process that is extremely interesting from a technical standpoint.

**Why did you join the Orano team?**  
Nuclear energy has concrete impacts in our daily life. It plays an essential role in improving our quality of life and feeds into progress that we all benefit from. I feel I'm playing a concrete role in producing low-carbon energy.

**Would you encourage a friend to join the group?**  
Yes, definitely. 😊 Orano has all the resources of a major group. It offers a broad array of jobs and career development opportunities.

**Do you have a favorite sport?**  
I've been riding horses 🐎 as a pastime for more than 10 years. I've also done competitive triathlons. When I have the time, I like running, swimming, and cycling..

**A goal you would be proud to achieve?**  
I'd like to continue combining sports and work as freely as I do today. And I also aim to climb the career ladder.

**When do you switch off?**  
When I'm doing sports, for sure!

**The coach's advice?**  
Believe in your dreams and go after them with everything you've got. When you believe in yourself, you can achieve anything! 🙌

**What's your job?**  
I ensure that the uranium enrichment process at the Georges Besse 2 plant runs smoothly to obtain material that can be used as fuel in nuclear reactors 🧪.

I coordinate the teams and operations to ensure the plant functions optimally, making sure progress and maintenance reports are up to date.

**How do you become a facility leader?**  
I completed a two-year vocational degree (BTS) in process management through a work-study program at Orano, to qualify as an operating technician. Then I was hired as a facility leader.





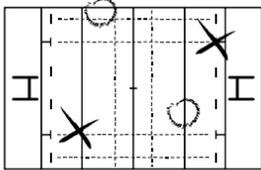
# PERFORMANCE AS A MINDSET

With the most modern industrial facilities in the world, recognized for their innovative technologies and processes, Orano has placed performance at the center of its commitments and growth ambitions. This is the linchpin of the new Opteam 26 program, which aims to drive performance forward by getting all the Orano teams onboard. Fostering cohesion and team spirit is also what motivates Stéphanie Gaiffe, our plant captain at Orano La Hague. She is about to turn a new page in the site's history, one that will play a decisive role in the French strategy for fuel processing-recycling.



# SETTING THE COURSE

## FOR PERFORMANCE!



Performance is a prerequisite for any company. But you need to set a course, adopt a method and get your teams on board. With the coach, we break down the game plan.



### CODE NAME OPTeAM 26

Opteam 26 is a three-year program (2024-2026) designed to boost the performance of the entire group, by engaging all Orano teams in the adventure!

The aim is to put the group in a position to seize the many development opportunities that lie ahead.

This program is a contract for robustness and efficiency, agility, adherence to standards and sound financial management. All this, with a constant focus on the safety and security of employees and operations.

From a tactical standpoint, the plan is to improve the group's performance across all its activities and in the execution of its projects, by integrating and harmonizing all existing and future performance initiatives.

### GAME PLAN

#### ATTACK

Challenge our processes with a view to individual and collective efficiency

involve each employee and partner in global performance improvement • embed the problem-solving culture • promote a bottom-up pipeline of ideas • embrace AI for enhanced performance in all our skill areas.

#### MIDFIELD

Improve the reliability of our plants and delivery on our commitments for projects and services

meet timelines and commitments • maintain a robust and efficient industrial organization.

#### DEFENSE

Control our costs, a prerequisite for healthy management of the company

chase down waste • control material and human resources precisely to need.



### PLAY AS A TEAM!

By getting involved in this program, all employees, whatever their activity, job, or location in the world, are playing a part in the group's new impetus and in its growth. The main criterion for success is playing as a team! With a slogan, "One team One Orano," that embodies the company's strategy.

### A WORD FROM THE COACH

This program represents a commitment to the efficiency and resilience of our industrial model. It also underlines the dynamic that the group must demonstrate if it is to succeed in its development. These transformations, which concern all our jobs and functions and the way we work, will make us stronger. We are all contributors to the collective effort required for the team, Orano, to succeed.

Pascal Aubret – Senior Executive Vice-President, Performance



Objective: improve operating performance by €300M by 2026

### RESULTS

#### "Relaunch Melox"

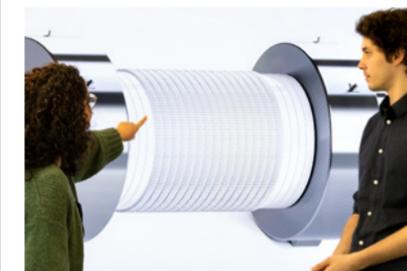
Orano Melox's program to relaunch production and exceed 100 metric tons by 2025 is implementing continuous improvement initiatives ("Kaizen" projects) aligned with the plant's challenges and involving a large number of employees in the field.

#### Subcontractors associated with "Design to Manufacture" approach

The new TN Eagle cask, designed by Orano NPS, is a standardized product, simpler and less expensive to manufacture and ever safer.

#### On-Time Delivery

- Successful startup of new Orano La Hague evaporators in R2 for the NCPF project (new concentration of fission products), mid-2024.
- Commissioning the new South Tortkuduk field to secure the group's mining production in Kazakhstan.





# On your marks, get set, GO!

## How well do you know Orano?

Test your knowledge while discovering the group's activities and facilities which make Orano a recognized global player throughout the fuel cycle.

**Q3 / Among the following, which is not a customer of Orano Dismantling & Services?**

- ▲ EDF
- ▮ Disneyland
- ★ L'Oréal

**Q4 / In your opinion, how many patents have been filed by Orano NPS in the world?**

- ▲ 100
- ▮ 400
- ★ 700

**Q5 / How many households are supplied each year with low-carbon electricity thanks to uranium enriched by Orano?**

- ▲ 29 million
- ▮ 90 million
- ★ 127 million

**Q6 / The Orano Malvési site has reduced its greenhouse gas emissions by 606,618 metric tons of CO<sub>2</sub> equivalent since 2005. What does this equate to?**

- ▲ The production of 4.34 million pairs of jeans
- ▮ The production of around 19.5 million smartphones
- ★ The production of 189.3 million bottles of water

**Did you know?**

The Orano La Hague plant has processed more than 40,000 metric tons of nuclear fuels since 1976.

**Q7 / In which countries does Orano have mines in operation?**

- ▲ Niger, Canada, Kazakhstan
- ▮ Kazakhstan, USA, Niger
- ★ Namibia, Canada, Uzbekistan

**Did you know?**

Orano NPS carries out 6,000 shipments per year with casks weighing up to 150 metric tons.

**Q2 / How many people work at the Orano La Hague site?**

- ▲ 20
- ▮ 500
- ★ 6,000

**Did you know?**

96% of spent fuel consists of reusable materials: 95% of reprocessed uranium and 1% of plutonium.

**Q1 / How many years of production do Orano's uranium resources and reserves represent?**

- ▲ 7 years
- ▮ 20 years
- ★ 50 years

**Q8 / How many different disciplines are grouped together in the group's engineering department?**

- ▲ 24
- ▮ 32
- ★ 44

**Did you know?**

Orano DS offers a broad range of services in three main activities: services for industry, dismantling, and radioactive waste management.

**Q9 / No. 3 worldwide for enrichment, Orano Tricastin is also the largest industrial platform in Europe. What is its surface area?**

- ▲ 300 hectares, or 412 football fields
- ▮ 650 hectares, or twice as large as Central Park
- ★ 700 hectares, or 14 golf courses

**Did you know?**

As the world's 3<sup>rd</sup> largest uranium mining company, Orano accords for around 15% of the global uranium market.

**Q10 / One gram of plutonium equates to 1 metric ton of oil.**

- ▲ True
- ▮ False

**Q11 / What is the surface area of the TN Eagle Factory based in Cherbourg?**

- ▲ 2,500 m<sup>2</sup>
- ▮ 4,000 m<sup>2</sup>
- ★ 6,000 m<sup>2</sup>

**Did you know?**

10% of France's nuclear-generated electricity is produced using Mox, a recycled fuel.

**Q12 / The radiological impact of the Orano La Hague site is 0.02 mSv per year. What does this compare to?**

- ▲ A transatlantic flight
- ▮ A CT scan of the abdomen
- ★ The consumption of 200 kg of bananas

**Did you know?**

Orano's engineering department is recruiting 600 engineers and technicians in 2024.

**Q13 / Thanks to the recycling of nuclear fuel, the share of ultimate highly radioactive waste represents:**

- ▲ 1 kg/year/capita
- ▮ 5 kg/year/capita
- ★ 10 kg/year/capita

## Your scores

For each right answer, add up your points!

▲ ▮ ★

Q1

Q2

Q3

Q4

Q5

Q6

Q7

Q8

Q9

Q10

Q11

Q12

Q13

### Between 10 and 13 points: gold medal!

Congratulations, you know Orano like no one else! Why not go one step further and join our teams? To apply, go to Orano Jobs!



### Between 5 and 9 points: silver medal!

Well done, you're quite familiar with the nuclear sector! To learn all about our sites and activities, we invite you to dive into our immersive tours. Ready to get on board?



### Between 1 and 4 points: bronze medal!

How about getting to know Orano and Nium, our manga characters? you'll soon know all there is to know about the nuclear fuel cycle!



# CAPTAIN OF INDUSTRY

As the first woman at the helm of Orano La Hague, Stéphanie Gaiffe took over at of the site in May 2023. It's a site she knows very well, since her first posting there in 2004, and which is getting ready to launch an ambitious sustainability program to extend current plants at the complex beyond 2040 and build future fuel processing-recycling facilities by 2045/2050.

## How does a person become the director of an industrial site like Orano La Hague?

I've always been interested in energy. Since I have a doctorate in applied mathematics, the idea of applying my scientific knowledge in the field of energy seemed like a natural fit. After a time in research, my interest in the nuclear industry led me to the Orano La Hague site.

I initially took over responsibility for nuclear materials for five years before joining the Nuclear Packages and Services (NPS) business unit, as head of nuclear transportation operations for the back end of the fuel cycle. I then returned to the site in 2014 where I held a range of production positions before becoming Technical Director in 2018, then Site Deputy Director in charge of Operations in 2021.

Processing-recycling is one of the centers of excellence in French industry, an area where advanced know-how has been built up over more than 55 years. For me, taking over the direction of this industrial complex last May is an honor and a very great source of pride.

## How do you understand your role?

It's important to provide a vision and set a clear course for the teams to bring them together around medium- and long-term challenges. You have to be able to engage employees at all levels, because results cannot be achieved without the collective energy of the whole workforce.

## What are the main challenges for Orano La Hague?

Minister Bruno Le Maire's announcements confirm the main thrusts of French policy on the Back End of the nuclear fuel cycle, and provide for major investments here.

We are turning a new page in the history of our industrial site with formidable challenges to deal with in the coming months and years. First of all, with the launch of a sustainability program to extend the plants beyond 2040, then the launch of studies for a new Mox fuels fabrication plant and a new plant for processing fuels by 2045/2050.

## How does Orano foster diversity and the inclusion of women in the industry?

There are 26% women at our industrial site. We need to go even further and attract more women to the world of industry. For example, we're actively encouraging the feminization of production jobs that have "historically" been occupied by men. We have observed that not only do women fill these positions considered physical or technical just as well as men, but they also bring, in addition to their skills, a sense of composure and empathy within their teams.

More than  
**40,000** metric tons  
of nuclear fuels processed  
since 1976

Over  
**6,000** employees  
including 1,500 service providers

## Coach or referee?

Both! On a day-to-day basis, I obviously have to arbitrate many issues, that's my role. I'm also surrounded by men and women who are passionate about their profession, and whom I support in their professional development. The results we achieve are the fruit of a collective and collaborative effort. These are very strong values for me.

## How do you reconcile your professional and personal life?

It's all a question of balance. Making time for my family and friends is important to me.

## What do you do with your free time?

I like spending time with my family and friends, gardening, reading, and cooking. Creating a friendly atmosphere and sharing with those around me is very important to me. In fact, it's essential. I also practice yoga, which is my "me time" to recharge my batteries.

## Sports, favorite activities?

I often hike on the footpaths along the Cotentin coast. It's a magnificent area, rich in contrasts that I also like to show off to my friends.

## What makes a good day for you?

First of all, meeting our production and maintenance targets in complete safety. It's also about finishing the workday with the sense that the collective has worked well.

**"OUR RESULTS ARE THE FRUIT OF A COLLECTIVE AND COLLABORATIVE EFFORT. THESE ARE VERY STRONG VALUES FOR ME"**

## A motto that stays with you?

"What doesn't kill you makes you stronger."

## What would you like to pass along to others?

I want to tell women that they have their place and are welcome in industry and in the nuclear sector in particular. This is a fascinating field with varied challenges and a wide range of jobs, all of which complement each other.

## A personal record?

Passing my pilot's license at the age of 15.

**"I'D LIKE TO TELL WOMEN THAT THERE'S A PLACE FOR THEM IN THE NUCLEAR INDUSTRY"**

# STÉPHANIE GAIFFE

Site Director  
Orano la Hague



# PUSHING BACK THE BOUNDARIES OF OUR BUSINESS

With its expertise in the transformation, recovery, and recycling of nuclear materials, Orano is not limited to the fuel cycle. The group is exploring new growth opportunities in markets of the future. One example is medical research, with Orano Med's highly promising cancer treatments. Another example is electric mobility with the recycling of strategic components for electric batteries. And there's the production of stable isotopes whose properties are sought-after in healthcare and quantum physics. Orano's purpose is to be a protagonist in tomorrow's world, and that means being ready to reinvent ourselves, always with an eye to the future.

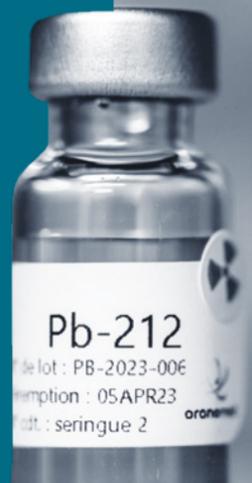


### HOPE FOR TARGETED ALPHA THERAPY

Targeted alpha therapy is a technology that combines lead-212 with various biological molecules (peptides, antibodies) to target cancer cells. It can therefore selectively recognize and destroy them, limiting the impact on surrounding healthy cells.

### RELIABLE SUPPLY OF LEAD-212

In order to produce and distribute its lead-212 conjugated drugs, Orano Med has invested in a unique set of facilities: the Maurice Tubiana Laboratory (LMT) in Bessines (France), the Domestic Distribution & Purification Unit (DDPU) in Plano (Texas), and the first Alpha Therapy Laboratory (ATLab) in Brownsburg (Indiana).



## CANCER THERAPIES: GATHERING PACE

Orano Med, a subsidiary of the Orano group, is seeking to develop a new generation of targeted cancer therapies using the unique properties of lead-212 (<sup>212</sup>Pb), a rare alpha-emitting radioisotope representing one of the most potent therapeutic payloads against cancer cells.



Discover our mission



### ORANO MED IN FIGURES

**120 employees** in France and the United States

**12 patented inventions**

**2 ongoing clinical trials**

**2 preclinical laboratories** dedicated to developing alpha-particle therapies

**1 global industrial platform** for the production of lead-212

### A DIVERSIFIED PORTFOLIO

The Orano Med pipeline consists of molecules developed in partnership or independently. Two candidate drugs are being clinically tested in humans:

- > A phase 2 clinical trial on neuroendocrine tumors with AlphaMedix™;
- > A phase 1 clinical trial on various types of solid tumors with an anti-GRPR peptide as a targeting molecule.

### ATLAB TO OPEN IN VALENCIENNES IN 2025

This will be Europe's first industrial-scale pharmaceutical facility dedicated to the production of targeted alpha therapies using lead-212.



### ALPHAMEDIX™

which targets neuroendocrine tumors, is the most advanced drug developed by Orano Med.



# AARON SCHATZMANN

R&D researcher and project leader, Orano Med

Aaron has been part of the Orano Med team for six years. His work gives him a sense of purpose because he is contributing to the discovery of innovative drugs for treating cancer. But that doesn't stop him from playing baseball whenever he gets the chance!

**What's your job?**  
I'm an R&D researcher and project leader. I supervise the day-to-day activities of our R&D team and manage various internal projects as well as external collaborations.

**What's the objective of the unit you're part of?**  
The DDPU (Domestic Distribution & Purification Unit) is located in Plano, Texas. It produces and distributes targeted alpha therapies for early-phase clinical trials and conducts preclinical development of lead-212 drugs to feed into Orano Med's pipeline. DDPU aims to offer a reliable supply chain for these innovative drugs.

**What do you like about your job?**  
I appreciate having an in-depth view of all our projects and trying to move them on to clinical development. It's an enormous brain teaser we have to solve. Only certain conditions work with particular targets and certain drugs, and it's up to our team to find the pieces that fit together!

**Why would you recommend Orano Med to a friend?**  
I often hear people say they want to get into an area where they can "help." At Orano Med, we are actively trying to beat cancer. It's hard to imagine anything more exciting!

**What's your favorite sport?**  
Baseball and college football are my favorite sports!

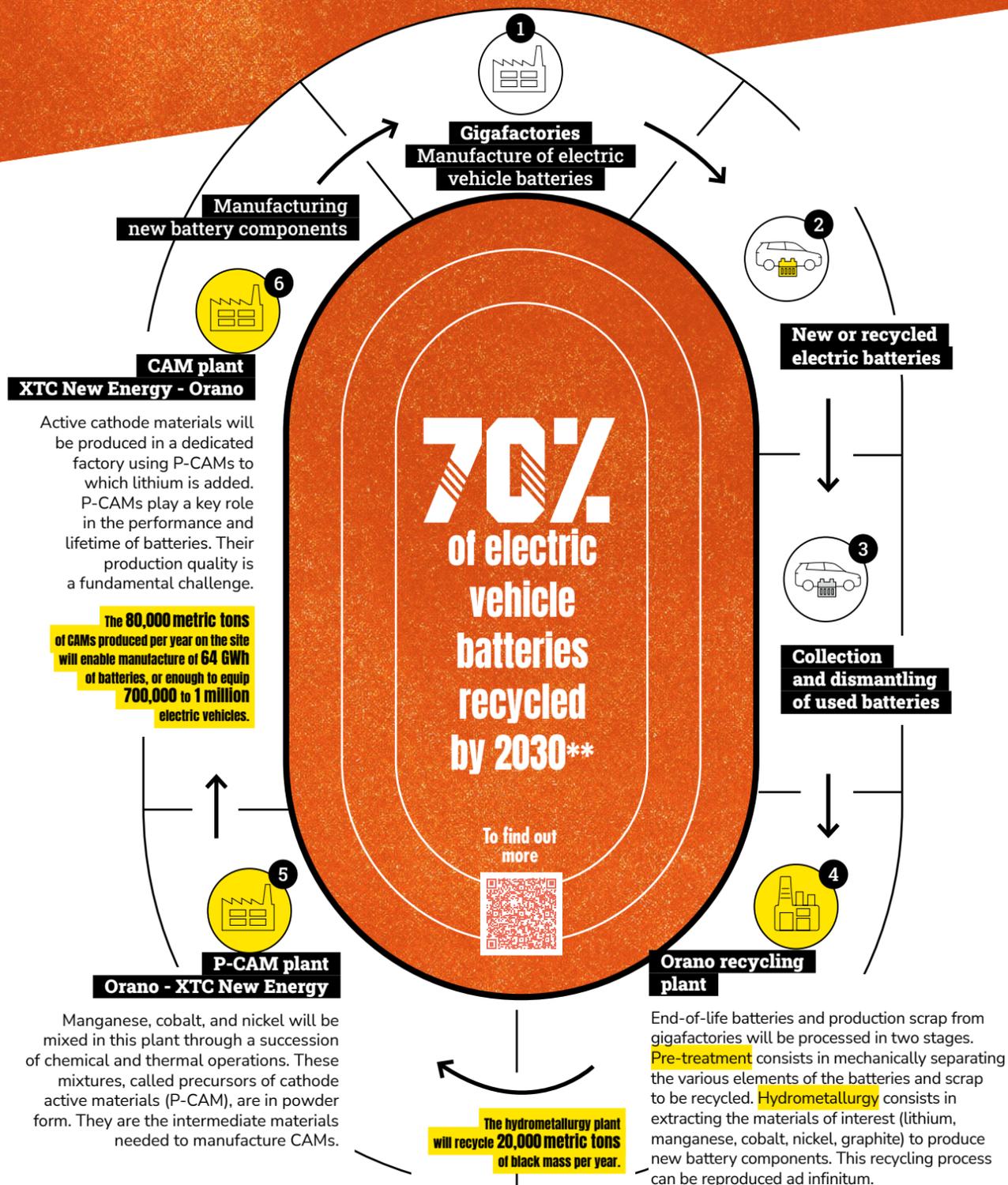
**Why did you choose Orano Med?**  
At Orano Med we're working on radiopharmaceuticals that can radically change patients' lives. I'm delighted to be part of the advances being achieved by Orano Med.

**A goal you'd be proud to achieve?**  
Seeing one of our drugs approved by the FDA would be a tremendous achievement.

**The best part of your day?**  
It's probably a mix between the moments when I get to interact with our team, and seeing our studies showing promising results.

# ELECTRIC VEHICLE BATTERIES: ORANO IN THE RUNNING

Orano is moving into electric mobility through an integrated project that includes two plants for the manufacture of cathode materials for electric vehicle batteries, in partnership with XTC New Energy, and a recycling plant\*. The industrial site will be up and running in the Dunkirk area, northern France, starting at the end of 2026. The aim is to cover around 10% of European market needs for each of the three activities by 2030.



\* Two pre-treatment units, under an Orano-Stellantis joint venture, and an Orano hydrometallurgical plant.  
\*\* Objective set by the European Union (EU).



## NEILA DJOUDI

Head of hydrometallurgy process development

Neila puts her hydrometallurgy knowledge to work for the recovery of strategic metals from electric batteries for more efficient recycling. A virtuous process benefiting the circular economy in today's highly promising electric vehicle market.

**What's your job?**

I lead and monitor internal and external R&D actions involving the hydrometallurgical process for the Orano batteries program. That means I help define and consolidate hydrometallurgy results with a view to the industrialization of the process, planned for the future Orano plant in Dunkirk.

**How long since you joined the battery project?**

I came to Orano and more specifically the batteries program recently, in November 2023.

**What do you like about your job?**

Each day is different. We face a lot of challenges, which is a source of motivation for me.

**Why would you recommend Orano to a friend or family member?**

For the company's values: innovation, know-how, and well-being in the workplace.

**Sports, favorite activities?**

I have two of them! Tennis to clear my mind and painting to relax.

**What's your favorite part of the day?**

Morning! I like taking time to exercise and read before diving into batteries 😊

**A motto or mantra that sticks with you?**

"There are no easy successes or definitive failures."

**Are you proud to be working on this project?**

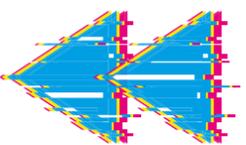
Absolutely! I believe this project will be a success. Recycling electric vehicle batteries will help to make the EU's ambitions for circular economy and net zero become a reality.

**Can you tell us about your background?**

I'm a process engineer. During my doctoral thesis, I worked on recovering cobalt from leachates of used batteries. This led me to work in industry (in Belgium) on developing hydrometallurgical processes for battery recycling.

# STABLE ISOTOPES POST-MATCH ANALYSIS

Orano produces **ultrapure isotopes** for high-tech markets like healthcare, quantum mechanics, and basic research. This **laboratory**, the only one of its kind in France, draws on all the skills in chemistry and enrichment developed at the **Orano Tricastin** platform.



## REWIND

### WHAT'S A STABLE ISOTOPE?

Stable isotopes are non-radioactive forms of atoms. Due to their specific properties, they are used in a wide range of applications, notably in the medical field (radiopharmaceuticals for diagnosing and treating cancer), in high-tech industrial sectors (quantum physics), and in basic research (characterization of particles like neutrinos).



### EXPERTS LIVE IN DUPLEX



**MAUD VINET,**  
PHYSICIST  
AND CEO OF QUOBLY

*"The supply of Siliconium-28 is essential for producing high-quality quantum bits, which are in turn key to enabling the advent of large-scale quantum computing. Siliconium-28 is therefore a critical element in the value chain, and Quobly is delighted that Orano is helping to establish a stable and sustainable French supply chain."*



**MARGARIDA GOULART,**  
PHYSICIAN AND COORDINATOR  
AT THE EUROPEAN COMMISSION  
RESEARCH CENTER

*"Nuclear medicine contributes significantly to the diagnosis and treatment of patients. In the European Union, over 1,500 nuclear medicine centers perform 9 million procedures every year."*

To find out more



## FREEZE FRAME

### A NEW DEDICATED LABORATORY

Inaugurated in October 2023, the 3,200 m<sup>2</sup> Jean-Fourniols Stable Isotope Laboratory (LIS) is located at the heart of Orano's Tricastin industrial site. With its expertise in isotope separation and the chemistry of elements other than uranium, the LIS provides France with a unique facility for producing stable isotopes by centrifugation and offers a competitive alternative to the few other worldwide producers.

## PLAY

### INTERNATIONAL CUSTOMERS

The very first deliveries of ultrapure isotopes took place during the second quarter of 2024. These stable isotopes are destined for startups and research laboratories in France but also in Europe, North America, Australia, Japan, and so on. Stable isotopes don't just play on their home turf!

# What do a fashion show, confetti, and Homer Simpson have in common?



Follow us on social media



# VISION FOR 2050

Orano's expertise in transforming and delivering value from nuclear materials is reflected everywhere in our lifestyles today and will be even more so tomorrow. Let's envision some of the possibles on the road to 2050.

Using the unique properties of a rare radioisotope, lead-212, cancer treatments target cancer cells without damaging surrounding healthy cells.

Nuclear-generated electricity is abundant and controllable, accessible to all and produced continuously.

Nuclear and renewable energies make significant contribution to net zero climate goals.

Stable isotopes are used in quantum physics, medicine and basic research.

By contributing to the fabrication of nuclear fuels for power plants, Orano is at the center of the immense challenge of electrifying uses.

More than 3 out of 10 light bulbs are powered by nuclear electricity from multi-recycled fuel. 30 years ago, this figure was 1 in 10 light bulbs using recycled Mox fuel.

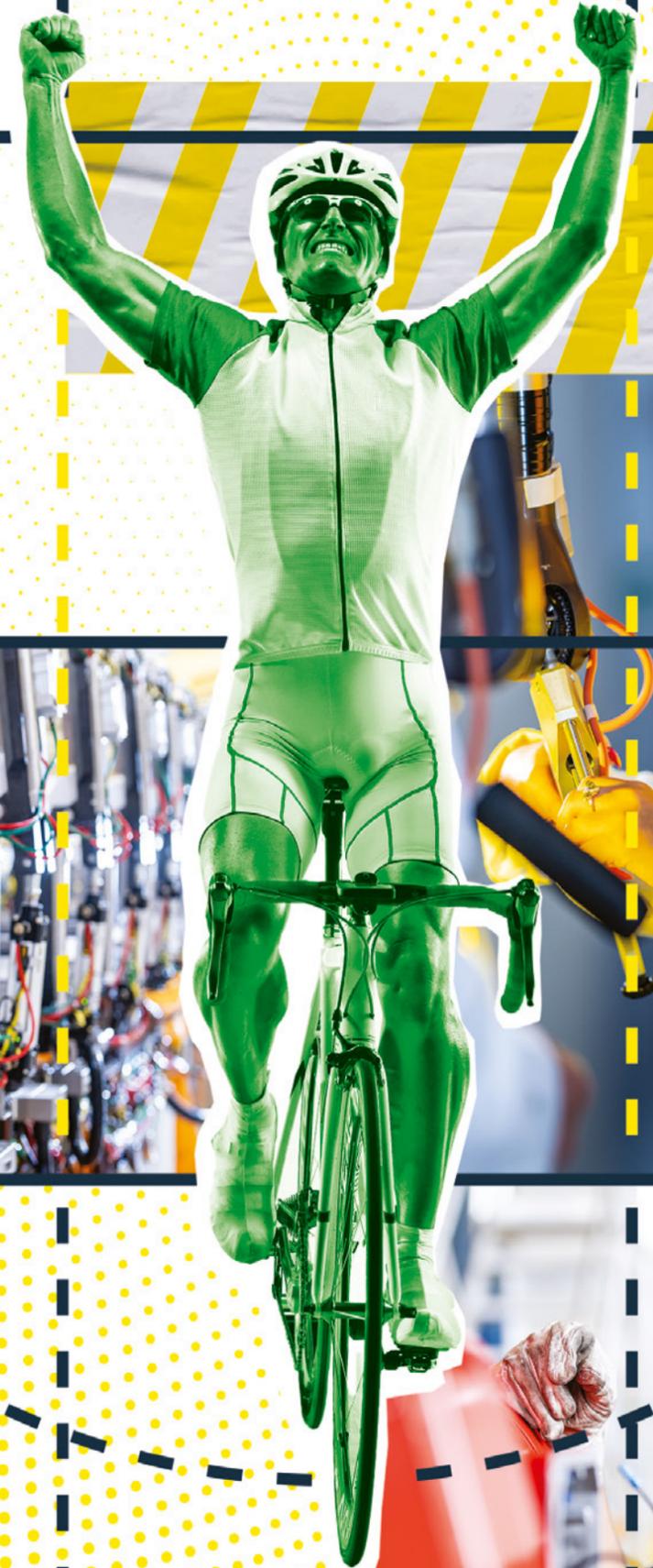
Electric mobility contributes to decarbonizing transportation.

Strategic components of EV batteries are recycled to make new batteries.

A new generation of mini-reactors produces low-carbon heat and reduces the volume and lifetime of nuclear waste.

Diversification of uranium ore supply sources enables us to maintain more than 20 years of resources and reserves for our customers.





# THEY MAKE ORANO'S FLAME SHINE BRIGHT

Working at Orano means sharing in more than just a business. Our 17,500 employees are committed to a group that contributes to safe and sustainable nuclear energy, in the service of preserving the climate, conserving resources, sovereignty and health. Working at Orano also means exploring the solutions of the future, and becoming part of a learning organization where skills are constantly being honed and developed. Above all, it's a human adventure, where working relationships, work/life balance, inclusion and solidarity are core values. We need talents, personalities and profiles from all walks of life to build the future of the nuclear industry together.

# Orano INSIDE

The nuclear industry has a bright future, and we need talent! Once again this year, we're recruiting nearly **2,000 permanent staff** in France, and training over **800 work-study** students and **200 interns**. Whether you're a student, a recent graduate or a seasoned professional, let us surprise you with a group where you'll share much more than a business and a profession, in a stimulating, inclusive environment that respects your personal life to the full.

## Work/life balance

At Orano, we defend the right to disconnect and we do everything we can to make your work environment a source of motivation, self-realization, and personal growth.

**90 days of remote work** per year, increased during pregnancy, for people with disabilities, or for caregivers



**Equal pay** between women and men, for equivalent responsibilities\*  
\* Significant structural difference - 2022 APEC study



**Paternity leave** in excess of one month

**Paid leave for employees** benefiting from assisted reproduction technology (ART)

## Gender equality: A vector for performance

Orano has been promoting the place of women in our group for over a decade. Professional equality is agreements with our social partners. Orano plays particular attention to recruitment and career development of women.

**Nearly 300 women executives and engineers** have taken part in leadership development programs

**2024 objective: a share of over 31% of women among permanent contract hires**

## Diversity & Inclusion

At Orano, diversity is a strength! The group fights against all forms of discrimination, ensures fairness and is committed to being inclusive of all differences.

Possibility of **paid leave** to attend medical appointments related to the any employee disability.

Nearly **700 workers** with disabilities among Orano's workforce in France

## Career paths allowing for variety and advancement

With us, your professional projects can take many forms but will always enable growth! Job transfers, development pathways, mentoring, stimulating projects, training programs: we provide everyone with tailored support. We also welcome candidates without qualification or lacking employment experience.

**38 hours of training** on average per employee in 2023

**500 +** job transfers per year

**100 +** people trained for a professional qualification certificate (CQP - Certificat de Qualification Professionnelle) in 2023

## Work-study: win-win contracts

We recruit **over 500 work-study trainees** per year at our various sites in France. A rewarding experience that can open the door to employment in our group. Another benefit: Orano contributes to cost of **double accommodation**.

**500 + work-study vacancies** from vocational certificate level (CAP) through to BAC + 5 years in a wide range of disciplines

**One third of work-study students** move on to a contract of employment with Orano



## Comprehensive and attractive compensation packages

In addition to fixed remuneration, Orano's compensation policy takes the individual performance of each employee into account. Collectively, it includes profit-sharing and incentive schemes. The group also offers high-quality, long-term welfare benefits.

**Financial support** in case of geographical mobility for permanent positions

Orano takes **1st place in the HAPPYINDEX® TRAINEES FRANCE 2024 ranking**



In the **1000 + work-study trainees and interns category**



# COME AS YOU ARE

No matter the exact career path, Orano is convinced that a wide range of profiles and experience enriches the group. There's a place for every talent... and here's the proof!

She changed paths



**Samia**

"I'm looking for a new job but I have no training for the nuclear industry."

A professionalization contract leading to a certificate of professional qualification (CQP) via a 9 to 18 month work-study program, with the aim of being hired on a permanent contract at the end

Build skills and autonomy rapidly thanks to job mentoring with a tutor

Each year, Orano recruits and trains more than 100 people with no previous nuclear industry experience or training, to take up technical positions. Motivation is the decisive criterion!

The technician



**Marc**

"Acquiring new skills is a real asset for my career development."

Skilling up right in the field with our Écoles des métiers schools

More than 2,700 training modules for employees (technicians, engineers, and executives)

Virtual room at the Orano Melox site. Immersion in virtual and augmented reality combined with practical exercises to get you up and running fast

The engineering student



**Jade**

"I wanted to go with a company where I'd be encouraged to become a leader."

From work-study trainee to engineer

Nearly 30% of permanent hires from work-study contracts, internships, and fixed-term contracts

Orano aims to recruit 39% women managers and engineers by 2025

The Women and Talent program Supporting women's leadership in management positions

The engineer



**Jules**

"An engineer role, yes, but I want to be in the field too!"

Leadership development with our l'École du Management school

2,000 + managers trained each year in France and abroad

Orano Link, a support program for managers, offers activities every week, including subject-specific webinars, meetings and coaching

ALL TOGETHER FOR TEAM ORANO!



# BENJAMIN GAUDICHE

From the weights room to the control room. Benjamin's career path defies the odds! Now a system operator, this former coach is an example of a successful job make-over.

**What does your job involve?**  
I'm a system operator at the Orano La Hague site. I use a PC to remotely operate the equipment that purifies and concentrates plutonium. From the samples taken, I can check the plutonium concentration level.

**Do you enjoy your job?**  
Yes, very much so! I've been made to feel very welcome in the team 🍷. There's a real family spirit. And the shift work frees up my time for sports.

**What do you like most about your job?**  
No two days are alike. I'm still learning every day. Having to build up my knowledge of chemistry and nuclear has really helped me grow. It's fascinating!

**How did you become a system operator?**  
Before this, I was a sports coach 🏆. I thought that without more advanced studies, I wouldn't be able to work in industry. But in fact, I was given the chance to take a Certificate of Professional Qualification in Industry (CQPI) – a diploma co-financed by the French government and Orano. After a year, I was hired on a permanent basis as a production operator.

**What's your professional goal?**  
As a young father, I care about the opportunities for career development and the stability offered by the group. For the future, I'm aiming for the role of technical advisor then shift manager.

**Would you encourage a friend to join the group?**  
Yes, absolutely 👍. Because the jobs are interesting, there are good prospects to make your way up, and the comradeship. But also because of the sense of contributing to the production of low-carbon energy, in an industry that knows how to recycle nuclear fuel.

**How do you spend your free time?**  
I do a lot of sport: fitness, body building, climbing. I also reached the final round of the Ninja Warrior show 🏆 (season five in 2020).



System operator

# PLAYER TRADING AT ORANO



With its 17 industrial sites in France, Orano plays the transfer card to offer its teams new professional challenges! The group supports its employees as their careers develop.

**3**

**GUILLAUME PORCHE**  
Moving from dismantling to healthcare

From leading nuclear dismantling projects to designing an R&D laboratory for Orano Mining, my career has involved multiple fields! At Orano Med, I currently work on industrializing lead-212 radiopharmaceuticals.

**7**

**JUSTINE CHANDELIER**  
Progressing like a pioneer

Among the first women in the production workshop, I became a technical advisor in my team. After 16 years in the workshop, I joined the Facilities Compliance Center at Orano La Hague.

**10**

**SÉBASTIAN SZABO**  
Exploring new challenges

During my work-study program at Orano Dismantling and Services, my managers pushed me to continue my studies. Currently a safety engineer, I'm leaving southern France for Paris to join the Orano Projects team.

**9**

**AURÉLIA WALLET**  
Consolidating my professional network

After 9 years in environmental safety and 10 years in enrichment chemistry, I'm back to the plant that gave me my first chance: Orano Melox. Each mission has strengthened my professional network.

**16**

**LAURÈNE CHABERT**  
Seizing opportunities

Initially an engineering manager in used fuel cask manufacturing, I wanted to broaden out and carry on learning. I joined Orano Projects for the diversity of disciplines and materials we work with.

**18**

**JÉRÔME MUNOZ**  
Moving forward as a team

After 14 years at Orano Melox in the industrial automation unit, I moved on to head up the activity. Through my career path, I have discovered various jobs and above all teamwork, which has brought me personal growth.

**22**

**RAJA MECHERGUI**  
Building skills

For three years at the Orano La Hague site, I was proud to discover how the fuel cycle works. Now I'm leaving for the Bagnols-sur-Cèze site to explore new technologies and be closer to my family.

**26**

**NICOLAS DEPARDON**  
Progressing through several positions

From operator to section manager, my progression was a natural process. I learned through all the interaction and built experience that helped me gain legitimacy to move forward. I was also able to pick up my studies and I have now worked at several Orano sites.



# ORANO AT A GLANCE



ORANO

# Giving nuclear energy its full value



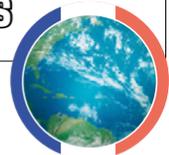
As a recognized international operator in the field of nuclear materials, Orano delivers solutions to address present and future global energy and health challenges. Orano's expertise and mastery of cutting-edge technologies enable it to offer customers high value-added products and services spanning the entire fuel cycle. Drawing on their skills, unwavering dedication to safety and constant quest for innovation, all the Group's 17,500 employees are committed to developing expertise in the transformation and control of nuclear materials, for the climate and for a healthy and resource efficient world, both today and tomorrow.

## Our references

**Global player** across the entire fuel cycle, from uranium ore mining to fuel recycling

**The world's no. 1 recycling platform** for nuclear materials

One of the world's **top 3** uranium producers



**No. 3 worldwide** in uranium enrichment

**World leader** in uranium conversion

**The world's premier Mox fuel fabrication plant** (Orano Melox)



**French leader** in nuclear dismantling and operations support services

**Over 40 years' experience** in nuclear engineering

**Leading player** in global nuclear transport

## Our activities

As an international expert in the nuclear fuel cycle, Orano transforms and delivers value from nuclear materials so that they can contribute to society's development in the fields of energy, resource efficiency and health.

### Mining



The group's mining activities cover exploration, production, and commercialization of uranium throughout the world, as well as the remediation of former mining sites. Orano ranks among the world's leading uranium producers.

### Uranium conversion and enrichment



With a unique integrated industrial platform and the most modern facilities in the world - the Philippe Coste conversion plant and the Georges Besse 2 enrichment plant - Orano is recognized across the entire market for its technical expertise and cutting-edge processes.

### Recycling nuclear fuel



Thanks to the performance of its la Hague and Melox sites, the only ones of their kind in the world to operate on an industrial scale, Orano is recognized as the international leader in the processing and recycling of used nuclear fuels.

### Nuclear Packages & Services



Throughout the fuel cycle, Orano provides its unique expertise in the design, certification and production of casks, as well as the associated transport operations, whether by land, sea or rail, with the highest level of risk control.

### Engineering



Engineering operations involve engineering consulting services, contracting and project management assistance, design and construction engineering, plant commissioning and operational support. The teams operate in the group's own facilities and for external customers in France and worldwide.

### Dismantling and Services



With 50 years' experience, Orano is a benchmark supplier in the field of operations support for nuclear sites (work-site logistics, specialized maintenance and radiological safety), as well as the management of radioactive waste and dismantling of end-of-life equipment and facilities.

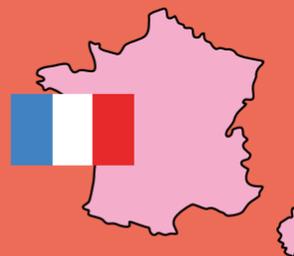
### Orano Med



Orano Med - a subsidiary of Orano - is a company that brings together biotechnology and nuclear science

to develop innovative therapies to fight cancer using the unique properties of lead-212.

# Our industrial platforms



Orano has some of the most modern facilities in the world, recognized for their innovative technologies and processes and their respect for the environment.

## Orano Malvési



Orano Malvési carries out the first phase of uranium conversion, which consists in purifying the natural uranium ore supplied by the mines to produce uranium tetrafluoride (UF<sub>4</sub>).

### World leader

in uranium conversion

**90** million homes supplied with electricity each year from uranium enriched by Orano

## Orano Tricastin



The Tricastin site includes two facilities with worldwide standing: Philippe Coste (second conversion phase) and Georges Besse 2 (enrichment).

**No. 3** in the world for enrichment

**Largest** nuclear complex in Europe

## Orano la Hague



The la Hague site processes nuclear fuels to recover and recycle energy materials and produce new low-carbon electricity.

**1,000 +** metric tons of fuel processed every year

**Over 55** years of industrial experience

## Orano Melox



Orano Melox produces Mox, a fuel mix produced from recycled nuclear fuels.

### Global benchmark facility

for Mox fuel fabrication

**44** reactors worldwide have produced electricity from Mox to date

## Orano Bessines



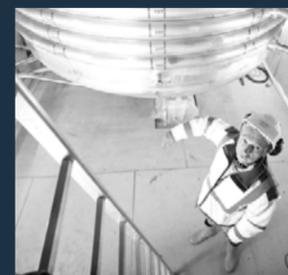
The site hosts major industrial activities including the Innovation Center for Extractive Metallurgy (CIME) and Orano Med facilities devoted to medical research.

**6** centers of expertise

**2** research laboratories

# Orano stories

## Orano Projects: unique know-how in conducting large-scale nuclear projects



**Three new evaporators** for concentrating fission product (NCPFs) in the T2 unit of the UP3 plant at la Hague were commissioned in summer 2023.

The success of this collective project will ensure the continuity of this unit, which is vital to Orano la Hague's processing-recycling activities, for decades to come. This major project, which took **8 years** to complete, mobilized up to **800 people**. It saw the installation of **150 km** of piping and **350 km** of wiring! New step in summer 2024 with the commissioning of NCPF R2 in the UP2-800 plant

## TN Eagle Factory: a 4.0 plant for a new generation of casks

Based in Cherbourg, this entirely automated digital manufacturing plant is designed to assemble the **TN Eagle**, a new cask for the transport and dry storage of used fuels. This new **6,000 m<sup>2</sup>** facility features a very innovative, seamless manufacturing process, for greater robustness and a record manufacturing time of **15 months**.



## SABRE: a high-performance mining method

This new, patented approach, developed for the past **10 years** by Orano engineers, make it possible to extract uranium ore from the surface and selectively, **without human intervention**. Access boreholes are drilled, the ore is then extracted by means of a high-pressure water jet, and finally, it is brought to surface as sludge. This promising solution, which will take the place of conventional open-pit or underground methods where these are not cost-efficient, opens up **new prospects** for uranium mining, notably in Canada in the Athabasca Basin.

# Key data

as at December 31, 2023

## In the top 3 worldwide

IN OUR KEY ACTIVITIES

### 17,500

EMPLOYEES, WITH 14,000 IN FRANCE

### 4.8 billion euros

IN REVENUE

### 50%

OF REVENUE FROM ABROAD

## Environment

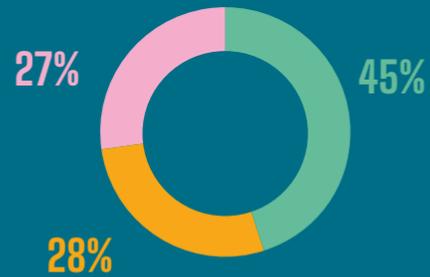
### - 29%

REDUCTION IN GHG EMISSIONS FOR SCOPES 1 AND 2 SINCE 2019

### - 39%

REDUCTION IN WATER CONSUMPTION SINCE 2019

## REVENUE FROM MAIN ACTIVITIES



**Mining:** extraction of uranium ore

**Front End:** conversion and enrichment of uranium for nuclear fuel fabrication

**Back End:** recycling nuclear fuel

## 17

 INDUSTRIAL SITES IN FRANCE

### €30.8 billion

BACKLOG

### €300 million

INVESTED IN NUCLEAR SAFETY OF FACILITIES

Consult the Activity Report



# Orano worldwide

Orano is a key partner of the nuclear industry in regions with the world's largest reactor fleets, such as Europe, the United States and China, and is also a long-standing partner of Japanese utilities.

## 200

 customers

in 

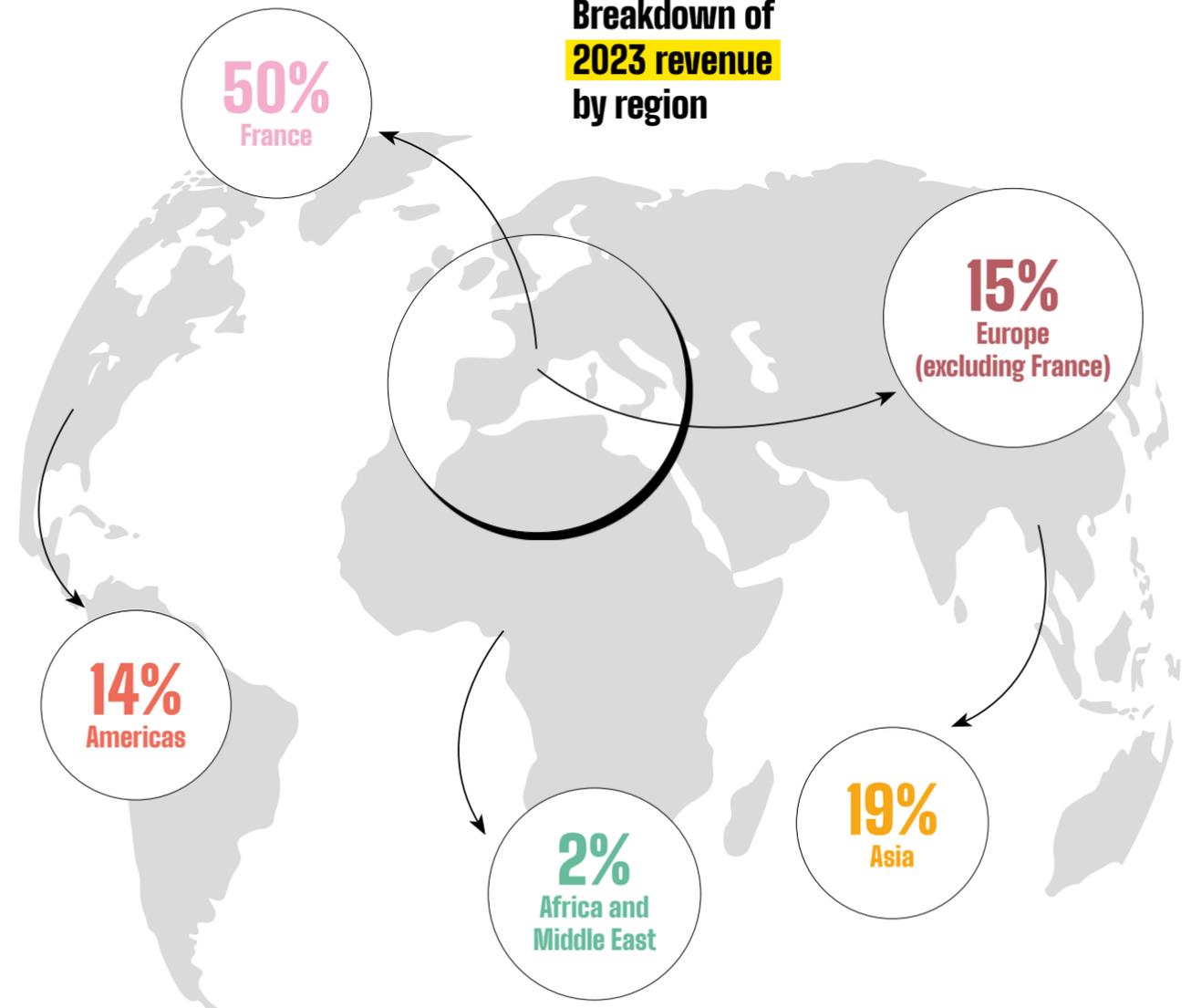
## 30

 countries

## Our customers

- Electricity utilities (nuclear power plant operators)
- Research reactor operators
- Nuclear fuel cycle players
- National agencies and authorities
- Industry players

## Breakdown of 2023 revenue by region



## Low carbon

Nuclear energy is one of the world's least CO<sub>2</sub>-emitting forms of power, with emissions comparable to wind power, 4 times lower than solar, 40 times lower than gas, and 70 times lower than coal. Its very small CO<sub>2</sub> footprint makes it an indispensable component of energy transition.



## Independence

Nuclear energy contributes to domestic energy independence. In France, with predominantly nuclear-generated electricity produced domestically, nuclear energy is a crucial asset for France's energy sovereignty.

## Reliable and controllable

Thanks to its robust production system, the nuclear industry supplies large quantities of electricity continuously, with flexibility to adapt to demand.

## Concentrated energy

Because uranium has a much higher energy density than hydrocarbons (100 g of uranium produces as much energy as 1 metric ton of oil), it can be stored more easily. France has several years' worth of stockpiled depleted uranium. Moreover, uranium is an abundant resource available on all five continents.



## Benefits of nuclear energy

### Recyclable

Orano recycles nuclear fuel to produce new fuel, thus helping to preserve natural resources. In France, 1 in 10 lightbulbs is powered by electricity generated from recycled nuclear fuel.

### Critical in the electricity mix

In all the energy transition scenarios studied by the IPCC and IEA for producing low-carbon electricity, significant development of renewable energies can only be envisaged in conjunction with nuclear power, in order to avoid reliance on fossil fuels.

### Innovative tech

The nuclear energy sector is developing expertise and technologies that are unique in the world, enabling us to explore other markets, in the service of a more sustainable world.



## Executive Committee

as at June 1, 2024



**Nicolas MAES**  
Chief Executive Officer



**Frédéric de AGOSTINI**  
Nuclear Packages & Services Business Unit



**Pascal AUBRET**  
Performance



**Patrick CHAMPALAUNE**  
Senior Executive Advisor to the CEO



**David CLAVERIE**  
Finance



**Hélène DERRIEN**  
People & Communications



**Guillaume DUREAU**  
Projects Business Unit, Innovation, R&D, Nuclear Medicine, Magnets and Batteries



**Laurence GAZAGNES**  
Safety, Health, Safety and Environment, Project Industrialization



**François LURIN**  
Chemistry-Enrichment Business Unit



**Jean-Christophe PATOUT**  
Dismantling & Services Business Unit



**Jacques PEYTHIEU**  
Customers and Strategy



**Xavier SAINT MARTIN TILLET**  
Mining Business Unit



**Corinne SPILIOS**  
Recycling Business Unit

# Committed to the world of tomorrow

**“Developing know-how in the transformation  
and control of nuclear materials, for the climate,  
for a healthy and resource-efficient world,  
now and tomorrow.”**

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don't waste it.



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