



ORANO AT A GLANCE



orano

ORANO

Giving nuclear energy its full value



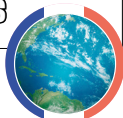
As a recognized international operator in the field of nuclear materials, Orano delivers solutions to address present and future global energy and health challenges. Orano's expertise and mastery of cutting-edge technologies enable it to offer customers high value-added products and services spanning 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.

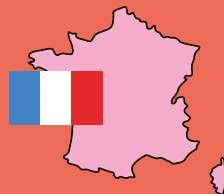
Orano Med



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 (UF₄).

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

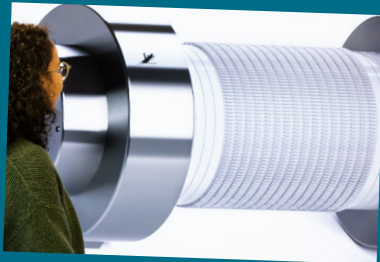


Three new evaporators for concentrating fission product (NCPFs) in the T2 unit of the UP3 plant at la Hague were

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 m² 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

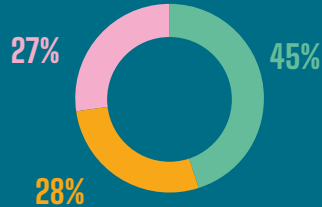
- 29%

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

200

customers

in

30

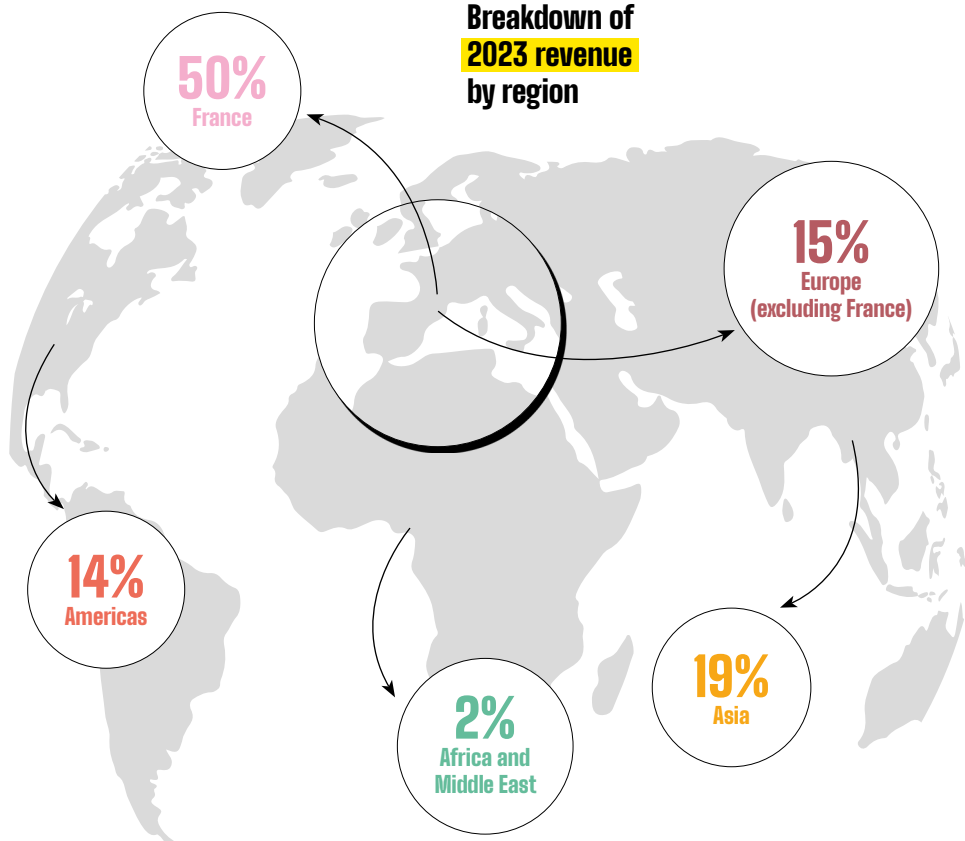
countries

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.

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 CO₂-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 CO₂ footprint makes it an indispensable component of energy transition.



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.



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.

Benefits of nuclear energy

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.

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.



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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