



GOUVERNEMENT

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Égalité
Fraternité*

France 2030 : one year of action to live better, produce better and understand better

Press kit
Friday, November 18, 2022



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BRINGING THE
FUTURE
CLOSER



FOREWORD

“France 2030” is a major transformation, the effectiveness and the impact of which will be determined. The “France 2030” of today is all about creating a turning point in history. The “France 2030” of tomorrow will be France’s responses to a changed world, with jobs located across the country.

One year on, the results are there for all to see. More than sixty schemes have been opened and more than 1,700 winners from across the country have benefited from financial support. Some €8.4 billion has already been pledged, with this amount set to reach €20 billion by the end of 2023. Half of the funding has been given to emerging key players, and the other half to those working to decarbonize industry.

Most importantly, we have achieved a set of real goals that were completely unthinkable just a few years ago, ranging from mini-launchers, hydrogen and semiconductors to the development of a quantum computer and even electric vehicles. Thanks to this collective momentum, we are once again at the forefront, with France working to secure a more sustainable future.

Emmanuel Macron
President of France



France 2030

France 2030 is unprecedented in its scale: €54 billion is being invested so that our businesses, our schools, our universities and our research organizations fully succeed with their transitions in these strategic sectors. The challenge is to enable them to respond in a competitive way to the world's future ecological and attractiveness challenges, and to showcase the future champions of our sectors of excellence. France 2030 is defined by two overarching objectives, which will see 50% of expenses given over to the decarbonization of the economy, and 50% to emerging key players, those at the forefront of innovation, without neglecting the environment (in the sense of the "Do No Significant Harm" principle).

France 2030 is being implemented collectively: designed and deployed

in consultation with economic, academic, local and European key players to establish strategic guidelines and decisive action. Project holders are invited to submit their entries via the current application process, which is a demanding and selective one, to benefit from state support.

France 2030 is being led by the French General Secretariat for Investment, in charge of France 2030, on behalf of the Prime Minister, and in partnership with the relevant government ministries.

France 2030 is being implemented by the French National Research Agency (ANR), the French Agency for Ecological Transition (ADEME), Bpifrance and the Caisse des Dépôts et consignation (CDC).

The France 2030 investment plan:

Sets out a twofold ambition: sustainably transforming key sectors of our economy (energy, automotive, aeronautics and space) through technological innovation, and positioning France not only as a player but as a leader in the world of tomorrow. From basic research to the emergence of an idea and the creation of a new product or service, France 2030 supports the entire life cycle of innovation right up to industrialization.

€54

billion

is being invested by France 2030
to build the France of tomorrow

France 2030: a priority government policy

€54 billion, 10 objectives and 6 conditions for success to live better, produce better and better understand the world

Unveiled by the President of France on 12 October 2021, France 2030 has stepped up its deployment to shape our ecosystems and **sustainably transform** key sectors of our economy through **innovation, industrialization and research**.

This priority government policy has one clear ambition: to position France not only as a player but as a leader in the world of tomorrow.

Its strategy is straightforward with **10 precise and easily identifiable objectives and 6 conditions for success to achieve them:**

10 objectives:

1. By 2030, develop small, innovative nuclear reactors in France with better waste management
2. Make France the leader for green hydrogen and develop cutting-edge renewable energy technologies
3. Decarbonize our industry and input production
4. Produce 2 million zero-emission vehicles in France by 2030 and develop sustainable, sovereign and resilient mobility

5. Produce the first low-carbon aircraft in France by 2030
6. Innovate for healthy, sustainable and traceable food
7. Produce at least 20 biopharmaceuticals in France, particularly against cancers and chronic diseases, and develop and produce innovative medical devices
8. Place France once again at the forefront of cultural and creative content production
9. Play our natural role in future space adventures
10. Explore the seabed

Six conditions for success:

- Secure access to raw materials
- Secure access to strategic components, including electronics, robotics and smart machines
- Develop talent by adapting training for the jobs of the future
- Master sovereign and secure digital technologies
- Build on the excellence of our higher education, research and innovation ecosystems
- Fast-track the emergence, industrialization and growth of startups

France 2030: the first tangible results

Decarbonized energy (nuclear and renewable) production:

- **Small and medium-sized nuclear reactors are becoming a reality:** the NUWARD project is progressing; **three other well-advanced projects have been identified and can be financed from the first quarter of 2023;**
- **Acceleration of innovation and industrialization of renewable energy, with support for first 17 projects selected** in sectors that demonstrate strong potential, in particular photovoltaics, floating wind turbines and energy networks (for example, the HT-20MW Eolink project and its partners, to develop and qualify a mooring hub to connect floating wind turbines to the grid).

Green hydrogen:

Thanks to France 2030, **large electrolyzer production plants will be built** as part of a series of Important Project of Common European Interest, to help secure our target of 6.5 GW of electrolysis installed in 2030.

Decarbonization of industry:

- **Decarbonization of highly emissive industrial activities such as steel production. Already 10 Mt less CO₂ is forecast at the 50 highest-emitting industrial sites**, which puts us on track to achieve the milestones set out in the 'National Low-Carbon Strategy for Industry' by 2030, in partnership with ADEME.
- **530 projects, led mainly by SMEs but also by large**

industrial sites that emit vast quantities of greenhouse gases, are being studied to take decarbonization further and faster but also to reduce consumption of fossil fuels.

Two million electric and zero-emission vehicles by 2030:

Securing the production of one million electric vehicles in France by 2027 and three battery gigafactories, with the aim of becoming autonomous in battery production by 2027.

Healthy, sustainable and sovereign food:

France 2030 is accelerating the agroecological and food transition by financing technologies and their deployment for the third agricultural revolution. **This transformation will, for example, enable France to bolster its position as the second-largest European producer** of agricultural machinery, while securing the decarbonization of this sector. Several calls for projects have been issued to meet tomorrow's food needs and to relocate strategic industrial links.

Fostering innovation in the field of health:

- **5 biopharmaceuticals** already produced in France and the creation of **10 new bioproduction lines**
- Relocation and clinical phase development of 19 potential biopharmaceuticals
- **Securing mRNA vaccine production in France**
- Building hospital healthcare data warehouses to speed up medical research, innovation and improvement of the health system
- Creation of the Health Innovation Agency.

Culture:

A virtual reality tour of Notre-Dame Cathedral through the ages, Paris.

Our natural role in the space adventure

France 2030 supports the development of reusable **micro- and mini-launchers** with **8 projects** funded in France.

Exploring the deep seabed:

France 2030 enabled the launch of **the first deep-sea exploration campaign** by the underwater drone UlyX, which took 15 dives this summer, 11 of which were between 3,000 m and 4,100 m.

Sovereignty in raw materials:

Thanks to the forthcoming opening of a new mine in the Allier region funded by France 2030, our country will **be able to meet 20% of its lithium needs. And again thanks to France 2030, recycling lithium ion batteries to open real urban mines will soon be a reality.**

Secure access to strategic components:

France 2030 will finance semiconductor component production plants, most notably in Crolles (Auvergne-Rhône-Alpes), with the aim of **doubling production capacity** in our country. In robotics, a scheme has been opened to identify potential solutions for the “industry of the future”.

Strategic digital technologies:

As part of the national quantum strategy, France 2030 has helped fund the acquisition of **the most powerful commercial analogue quantum computer in the world**.

Training talent for the jobs of tomorrow:

Thanks to the projects launched via the “Skills and jobs of the future” call for expressions of interest within the framework of France 2030, headed by the ANR (national research agency) and the Caisse des Dépôts, **450,000 people a year will be trained in the jobs of the future by 2030, and 4 million people will be made more aware of the ecological transition**.

Pushing back the boundaries of knowledge and speed up the transfer of innovations:

17 exploratory research programs, backed by the ANR, have been launched in emerging sectors, as well as **25 research programs** directly in support of the France 2030 objectives.

New resources, in the region of €500 million, are being deployed to encourage **technological transfer**,

to develop a reflex of innovation behind each scientific discovery and to guarantee that the research results have a tangible impact.

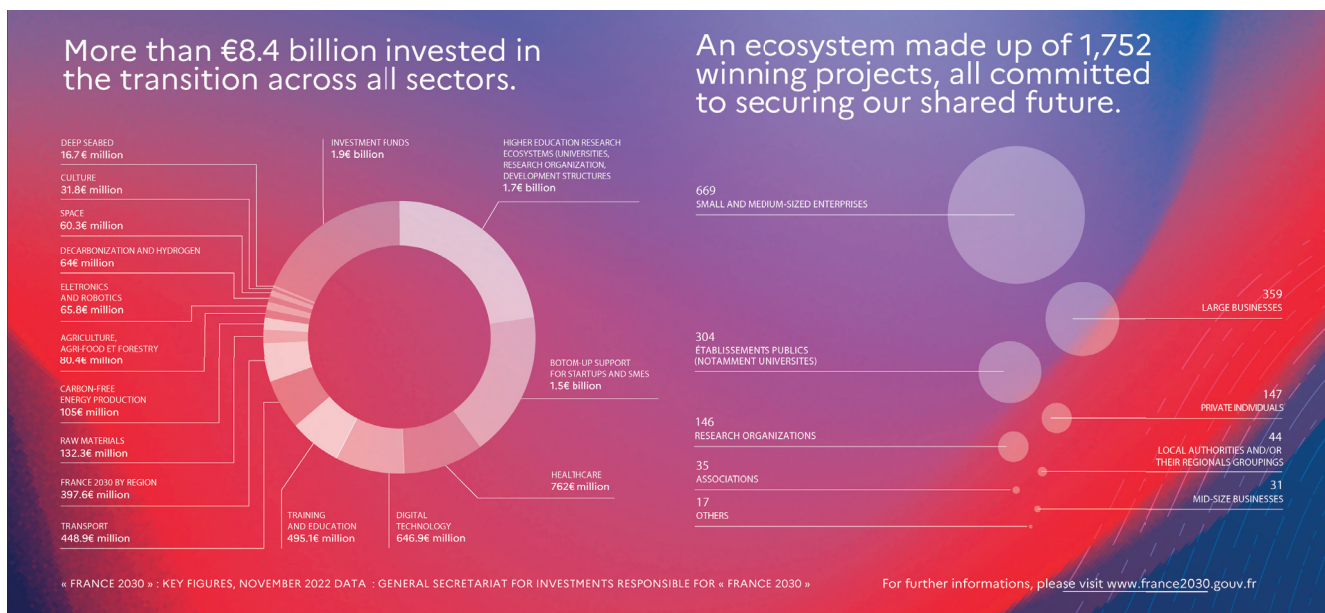
Fast-tracking the industrialization of startups and the growth of businesses of all sizes:

- **Support for the installation of 20 new industrial startup factories by Bpifrance**, to industrialize innovative products in strategic and buoyant sectors, such as biotechnology, healthcare, agri-food, batteries, materials or robotics.
- **Launch of the new industry loan distributed by Bpifrance**

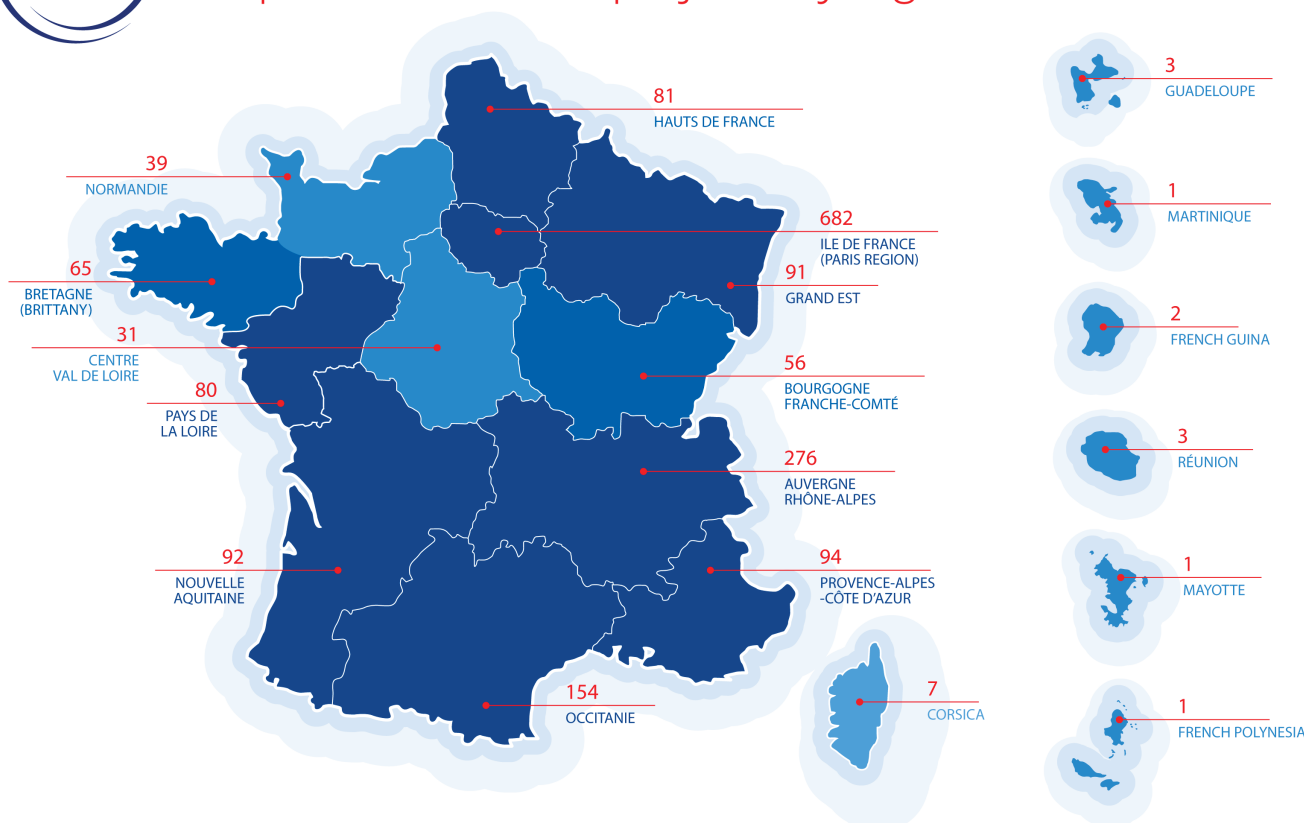
Two investment funds have been extended thanks to France 2030:

- **Ecotech 2, with a budget of €300 million** and managed by Bpifrance, for equity and quasi-equity transactions for minority stakes in innovative SMEs active in the fields of decarbonized renewable energies and green chemistry, the circular economy (waste recovery, eco-design of products and industrial ecology), smart power grids, and vehicles of the future.
- **SPI 2 – industrial project companies, endowed with a budget of €1.1 billion** and managed by Bpifrance, to enable industrial projects offering the most promising business prospects and jobs for the industrial sectors to find backing for their development.

France 2030: key figures



FRANCE 2030, THE REGIONS IN ACTION Map of France 2030 projects by regions



France 2030: specific and strategic objectives

Objective: By 2030, develop small, innovative nuclear reactors in France with better waste management

Strategy led by the Ministry for the Energy Transition and the Ministry for Industry

A nuclear sector to secure the decarbonization of the economy

Key objectives

- Diversifying uses, in addition to power generation: heat cogeneration, fresh water production, green hydrogen production
- Reducing the volume and radioactivity of waste from nuclear facilities to minimize their environmental impact
- Increasing long-term strategic autonomy through the multi-recycling of nuclear materials
- Improving nuclear safety and security

By 2050, the electrification of uses and the phasing out of fossil fuels will require 60% growth in decarbonized electricity production. France 2030 will support the nuclear sector to make investments in innovation to consolidate its positioning over the long term.

The ambitions in numbers

from 2030

Development of innovative reactors: support for the prototype phase of the most promising concepts

Launch of the construction of the 1st **NUWARD SMR** plant

One industrial solution for recovering highly radioactive waste

€1.2 billion
investments to develop a sovereign and sustainable nuclear industry for low-carbon energy production

Strategic priorities

1. Support the development of innovative modular nuclear reactors and help new players to emerge
2. Develop innovative solutions for managing radioactive materials and waste
3. Confirm the feasibility of multi-recycling in pressurized water reactors (PWR)
4. Support the sector's innovation efforts by deploying effective and renovated research tools

Tangible examples

EDF – Development of the NUWARD SMR

The NUWARD SMR is a new compact nuclear reactor concept with a capacity of 340 MWe, with increased safety and designed to reduce costs through a strong series effect. Among other things, it will enable many countries to replace thermal power plants (gas and coal) of comparable power to decarbonize the electricity mix.

Call for “Innovative nuclear reactors” projects

This scheme not only supports and assists the development of new nuclear fission or fusion reactors, which break away from existing reactors, but also fosters the creation of a new ecosystem of nuclear startups. Emerging businesses are the main target and will benefit from scientific and technical support from the CEA (French atomic energy commission).

Objective: Make France the leader for green hydrogen

Strategy led by the Ministry for the Ecological Transition and Territorial Cohesion, the Ministry for the Energy Transition and the Ministry for Industry

A hydrogen sector to secure the decarbonization of the economy

Key objectives

- Installing enough electrolyzers in France to produce all the hydrogen we need to decarbonize our economy
- Developing relevant hydrogen technologies, equipment and uses for heavy mobility (aircraft, ships, trains, buses, etc.) and for the decarbonization of certain industries (cement, steel, chemicals, glassware, fertilizers, etc.)
- Preparing the hydrogen technologies of tomorrow by supporting fundamental research in the fields inherent to hydrogen, to anticipate technological breakthroughs in the field

Hydrogen provides an array of solutions for decarbonizing industry and transport. It reduces our dependence on hydrocarbon imports and is one of the keys to achieving carbon neutrality by 2050. France aims to become a world leader for green hydrogen.

The ambitions in numbers

6.5 GW

Installed electrolysis capacity in France in 2030

650 kt

Quantity of green hydrogen produced in 2030 in France

100,000

Direct and indirect jobs created in France by 2030

€9 billion

to become a world leader for green hydrogen

Strategic priorities

1. Roll out electrolyzers connected to our carbon-free power grid, close to the points of use
2. Provide support to industrial equipment sectors and uses simultaneously
3. Build an industrial sector in France that creates jobs and guarantees our technological expertise. Become a world leader.
4. Promote the French green hydrogen production model

Tangible examples

Support for hydrogen electrolysis and equipment gigafactories under the Important Projects of Common European Interest (IPCEIs) program.

France provides €2.1 billion in aid for 10 gigafactories manufacturing electrolyzers, hydrogen tanks, fuel cells for hydrogen mobility and transport equipment. Total investments amount to €5.3 billion and 5,200 jobs will be created by 2030.

Development of regional hydrogen ecosystems in the regions

France is assigning €775 million to support hydrogen ecosystems, combining local hydrogen production, the development of refueling stations and uses in heavy mobility (buses, coaches, trains and goods transport) and in industry. Some twenty ecosystems have already been created across France.

Objective: Speed up innovation and the development of cutting-edge renewable energy technologies

Strategy led by the Ministry for the Ecological Transition and Territorial Cohesion, the Ministry for the Energy Transition and the Ministry for Industry

A renewable energy sector to secure the energy transition

Key objectives

- Supporting the emergence of a large-scale French photovoltaic industry
- Supporting the emergence of the French floating wind turbine sector by supporting its industrialization and the development of port infrastructures at seaboard scale
- Consolidating the position of national grid operators to develop solutions for the large-scale integration of renewable energies

By 2050, the electrification of uses and the phasing out of fossil fuels will require 60% growth in decarbonized electricity production. France 2030 supports the development and industrialization of renewable energy solutions in France.

The ambitions in numbers

2 GW

Annual production, assembly and integration of floating wind turbines in France

10 GW

Annual production of PV cells and modules in France

€1 billion

investment in the development of a sovereign and sustainable renewable energy industry, to secure decarbonized energy production

Strategic priorities

1. Support the transition to an integrated energy system with minimal environmental impact and managed social ownership
2. Reduce renewable energy technology costs by supporting research and innovation all along the maturity continuum
3. Develop an industrial offering of renewable energy solutions to support the energy transition
4. Make the energy transition professions attractive and align the human resources requirements of economic operators with the training on offer

Tangible examples

Pilot floating wind farms off the French coast from 2023 onwards

Several pilot farms, comprising a small number of floating wind turbines, will be commissioned from 2023 off the Mediterranean and Atlantic coasts. They will help validate the technical feasibility and economic viability of a fleet of several machines at full scale. They will also provide an opportunity to further understanding of the impact of these installations on their environment, whether in terms of the coexistence of different uses of the sea, or of the natural environment.

EOLINK

Eolink is an engineering company developing an innovative floating wind turbine whose architecture was patented in 2013. Its structures are smaller, lighter and generate power at a cost well below market standards.

Objective: Decarbonize our industry and input production

Strategy led by the Ministry for the Ecological Transition and Territorial Cohesion, the Ministry for the Energy Transition and the Ministry for Industry

A sector dedicated to decarbonizing industry

Key objectives

- Industrializing existing decarbonization solutions while continuing to innovate
- Supporting industrial investment in decarbonization solutions
- Strengthening synergies between companies and institutional players in the industrial zones with the highest emissions and defining a common path to decarbonization

Nearly three-quarters of industrial emissions come from the metallurgy, chemical and non-metallic mineral manufacturing sectors (cement, lime, glass, etc.). Decarbonizing these sectors is therefore a key issue for achieving the objectives of the National Low Carbon Strategy and carbon neutrality by 2050.

The ambitions in numbers

7.8 Mt

reduction in annual CO₂ emissions for the steel sector in 2028

2.5 Mt

reduction in annual CO₂ emissions for the cement sector in 2030

25 Mt

reduction in annual CO₂ emissions for industry by 2030

€5.6 billion

to innovate, industrialise and deploy decarbonisation solutions and support business investment to cut carbon emissions

Strategic priorities

1. Support the emergence of a competitive and innovative French offering of environmentally friendly solutions to reduce industry's carbon footprint
2. Cut carbon emissions while reducing the dependence of certain industrial sectors on hydrocarbon imports
3. Prioritise the most exposed and emission-intensive industrial sectors
4. Train more young people and professionals in jobs that concern decarbonisation

Tangible examples

Support for a project led by CIXTEN (SME)

Conversion of low-temperature waste heat into electricity or mechanical energy. The patented process aims to double the output currently achieved. Aid of €600k granted as part of the "IBAC PME" call for innovation projects.

Support for a project led by FAO (SME)

Development of an infrared (electric) grain dryer, replacing aeraulic dryers that use gas/fuel oil. Aid of €1.04 million granted as part of the "IBAC PME" call for innovation projects.

Objective: Produce two million zero-emission vehicles in France by 2030 and develop sustainable, sovereign and resilient mobility

Strategy led by the Ministry for the
Ecological Transition and Territorial
Cohesion and the Ministry for Industry

Clean and efficient mobility for all

Key objectives

- Producing as many zero-emission vehicles in 2030 in France as combustion-powered vehicles at the end of the 2010s.
- Decarbonizing mobility and making it more fuel-efficient, most notably by providing the most suitable service depending on the need to travel and by facilitating the development of electric mobility.
- Supporting diversification and the investments of subcontractors in the automotive sector
- Ensuring the sovereignty and resilience of our mobility solutions by enabling France to harness the added value generated by the development of low-carbon modes of transport.
- Ensuring an attractive, efficient and accessible travel offering for all.

The mobility of people and goods is a strong social and economic expectation in all territories. The development of new low-carbon, efficient and economical mobility services requires a comprehensive, intermodal approach combining technological and non-technological innovations.

The ambitions in numbers

10

New French new-mobility
champions by 2030

+6

Move up 6 places in the
logistics sector ranking

and enter the world
top 10

€3.6 billion

to invest in mobility systems and solutions
to step up the efficiency, performance and
competitiveness of the automotive sector

Strategic priorities

1. Support R & D to create a new competitive and sovereign technological brick offering
2. Invest in production tools in France, with focus on escalate the transition of the automotive industry
3. Develop battery production capacities
4. Diversify the activities of subcontractors, especially supplying the automotive sector
5. Revitalize regions, most notably by supporting them through the changes in the mobility sectors
6. Provide support to adapt infrastructures and speed up the deployment of automated and connected road mobility services
7. Speed up the transition to decarbonized and digitized mobility, in particular through efficient public transport systems
8. Improve economic, ecological and energy competitiveness in freight transport

Tangible examples

ALSTOM – TGV-M – Speedinnov “The high-speed train of the future”

The TGV-M train will have more capacity, be more ecological, more connected and more accessible. It comes with many major innovations:

- On-board surface area increased by 20% (a potential 740 places compared to 634 today)
- High energy efficiency for the lowest carbon footprint on the market (32% lower CO₂ emissions)
- 97% of recyclable components

- Increased accessibility on board
- Optimized maintenance and availability
- Unprecedented modularity, making it possible to adjust the number of wagons as closely as possible to market needs

VERKOR

France 2030 supports Grenoble-based company Verkor, which produces lithium-ion batteries for electric vehicles. The company is planning to install a new plant in Dunkirk.

Objective: Produce the first low-carbon aircraft in France by 2030

Strategy led by the Ministry for the Ecological Transition and Territorial Cohesion and the Ministry for Industry

Key objectives

- Working towards the goal of carbon neutrality for air transport by 2050
- Embarking on the transition to new low-carbon fuels, increasing the incorporation of sustainable alternative fuels and using new energy vectors such as hydrogen.

Half of all passenger aircraft in the world are French and European. Decarbonizing the aerospace sector addresses a threefold requirement: contributing to the global objectives set by the Paris climate agreement, maintaining our industrial fabric and excellence, and securing the trade surplus that makes France an international leader.

The ambitions in numbers

2 Gt CO₂

Avoided emissions of more than two billion tonnes of CO₂ in total by 2050

30%

Improved energy efficiency on in-flight consumption and ground practices

6%

Incorporation of sustainable aviation fuels (SAF) by 2030, in line with European ambitions

€1.5 billion

to invest in the decarbonization of the aviation sector

Strategic priorities

1. Ultra-efficient technologies to improve energy efficiency by up to 30%, in particular through the development of ultra-efficient wings, ultra-light aerostructures, new engines with very high dilution rates and optimized on-board energy systems through the extensive use of electrical energy, including hybrid-electric propulsion
2. The transition to new low-carbon fuels, increasing the incorporation of sustainable alternative fuels and using new energy vectors such as hydrogen. Scaling up the manufacture of sustainable alternative fuels is a major challenge if the products are to be produced in sufficient quantity to meet demand for SAF by 2030, while remaining competitively priced and able to replace their fossil equivalents and thus contribute to decarbonization of the transport sector.

Tangible examples

Airbus/Safran: ACCORD project

This is a major project bringing together all the national equipment manufacturers (22 partners) to define the future architecture of the electrical systems embedded on Airbus aircraft, on a basis that completely disrupts the state of the art existing in aeronautics.

Dassault: Falcon 10X project

The Falcon 10X is a high-capacity aircraft with improved energy performance (15-20% improvement) and which will be the first business jet in the world compatible with 100% SAF, entering service in around 2025. This diversification will also affect the upstream

Objective: Innovate for healthy, sustainable and traceable food

Strategy supported by the Ministry for Agriculture and Food Sovereignty, the Ministry of Ecological Transition and Territorial Cohesion and the Ministry of Industry

Key objectives

- Accelerating agroecological and food transitions through the dissemination of innovation
- Guaranteeing food sovereignty by strengthening the sectors' resilience and promoting the bioeconomy's potential
- Reducing GHG emissions and restoring biodiversity, ensuring forest resilience to strengthen their role as carbon sinks
- Structuring the agricultural and food sectors as well as the forest-wood sector in the regions
- Better understanding the links between diet and health to promote healthy eating habits

Accounting for the effects of climate change on agricultural production, developing agroecology, the forest-wood sector and building resilience in the agri-food sector are all major issues that need to be addressed to tackle the challenge of food sovereignty. France 2030 supports innovation and investment to secure access to healthy and sustainable food for all.

The ambitions in numbers

+100%

increase in the area cultivated with pulses

+20%

more jobs in agri-food sectors

-20%

decrease in overweight and obesity rates among children and adolescents

€2.3 billion
to invest in healthy, sustainable and traceable food to speed up the agricultural and food revolution.

Strategic priorities

1. Increase agricultural production capacity, diversify products and services, adapt to climate change and relocate food production.
2. Promote more integrated and resilient production models by financing innovation and its dissemination around regional sectors and by supporting new "entrepreneurs of the living world"
3. Experiment with and deploy combinations of innovations (technical and biotechnological, digital, organizational, etc.) to reduce greenhouse gas emissions and input consumption and to restore biodiversity
4. Help consumers move towards healthy and sustainable food, in particular through food education and the diversification of protein sources
5. Adapt forests and forest ecosystems to the context of climate change and regain our economic and carbon sovereignty through the forest-wood sector

Tangible examples

ARD Ever Vigne project

Ever Vigne is a collaborative project led by the industrial cluster ARD and which aims to offer new biocontrol solutions to combat grape downy mildew, with proven effectiveness in vineyards.

Green Spot Technologies InGREENdient project

InGREENdient is an industrial demonstrator project designed to speed up the marketing of fermented ingredients for human food, using by-products from the first stages of food processing (seeds, pulps, apple peel, orange, carrot, beetroot, wheat bran, etc.).

Objective:

Produce at least 20 biopharmaceuticals in France, particularly against cancers and chronic diseases, and develop and produce innovative medical devices

Strategy led by the Ministry of Health and Prevention (MSP), the Ministry of Higher Education and Research and the Ministry of Industry

Key objectives

- Boosting the attractiveness of France and accelerating (re)locations
- Supporting the excellence of French research and its applications to position France as a leader in highly innovative health products
- Giving new impetus to public-public and public-private cooperation to build ambitious projects for researchers, manufacturers and investors
- Facilitating access to the market

In terms of health, the France 2030 plan aims to help us “live better” by preventing, treating and combating emerging infectious diseases, to “produce better”, here in France, the medicines and medical devices that our country needs, and to “better understand” life and diseases, to better share knowledge of life sciences.

The ambitions in numbers

€1 billion

to sustain the excellence of our biomedical research

3

Bioclusters of global stature

20

Biopharmaceuticals products produced in France within 10 years

€7.5 billion
to make France the leading innovative and sovereign nation for healthcare in Europe

Strategic priorities

1. Support the excellence of our biomedical research through the creation of 3 bioclusters of global stature, new university-hospital research institutes, and support for national research infrastructures in biology and health, cohorts and biobanks
2. Invest in the 4 priority areas to produce biotherapies, develop and produce the medical devices of tomorrow, go further in terms of digital health, and deal with Emerging Infectious Diseases and Nuclear, Radiological, Biological and Chemical (NRBC) threats
3. Speed up the growth of startups and disruptive innovations by strengthening Bpifrance's investment in health
4. Become the European leader in clinical trials by simplifying regulations, helping to structure and providing financial support

Tangible examples

Astraveus LAKHESYS project

The LAKHESYS OSKL (Optimal Scale-Up) project aims to demonstrate the real-world performance of technology designed to optimize the upscaling of bioprocesses for cell and gene therapy applications, helping to de-risk the development stages, significantly reduce the investments required for production and lower costs of producing drugs in clinical development.

INOTREM

Inotrem is an advanced clinical biotechnology company specializing in the development of immunotherapies for inflammatory syndromes. Its ESSENTIAL project primarily aims to develop treatment for severe forms of Covid-19 and has just announced some very promising clinical results.

Objective: Place France once again at the forefront of cultural and creative content production

Strategy led by the Ministry for Culture (MC) and the Ministry for the Digital Transition and Telecommunications

Key objectives

- Defending French and European sovereignty and cultural diversity (production and distribution challenges)
- Speeding up the emergence of future national champions in certain key technology segments
- Scaling up the training of new talents for the jobs of the future
- Accelerating the spread of innovation to strengthen cultural democratization and accessibility to all audiences while better accounting for sustainable development issues
- Positioning France at the top of tomorrow's cultural content production sector

Culture is at the heart of the French model. It must also feature at the heart of the transformation driven by France 2030. It is crucial for individual development and for social cohesion, economic development, international influence, sustainable development and technological transformation.

The ambitions in numbers

+15%

more French champions in the sector (high-growth SMEs/mid-caps)

+30%

more talent destined for future professions in cultural and creative industries

***2x**

increase in the turnover of the cinema, audiovisual

€1 billion
to accelerate the digital and ecological transitions of the cultural sector, to affirm the issues involved in cultural sovereignty, and to help champions emerge among the cultural

Strategic priorities

1. Position France as a European leader for filming, production and post-production infrastructures and adapt training to the new requirements of the image and sound sectors
2. Accelerate the digital and ecological transitions of the cultural sector and train for the future professions
3. Position France as a European leader for cultural content and immersive technologies

Tangible examples

EMISSIVE: Advanced immersive experiences

Supported by the Tech and Touch fund run by Bpifrance, winner of IFCIC's Innovation in Culture award, and supported by the i-Nov competition, Emissive develops virtual immersive experiences such as Eternelle Notre-Dame and the Horizon de Khéops. A fascinating journey through time and space to be undertaken as a group.

INSULA ORCHESTRA-VR-TUOZ: Wynn project

How can we bring opera to an audience of teenagers and young adults, who are not the art's natural target? To answer this question, Laurence Equilbey designed an immersive concert combining the worlds of Beethoven's opera and manga using the latest virtual reality technologies developed by VR-Tuoz. The project is supported as part of the "augmented live performance experience" scheme operated by the Banque des Territoires.

Objective: Play our natural role in future space adventures

Strategy led by the Ministry for the Economy, Finance and Industrial and Digital Sovereignty, the Ministry for the Armed Forces, and the Ministry of Higher Education and Research

Play our natural role in future space adventures

Key objectives

- Bolstering the French New Space ecosystem by allocating two-thirds of its support to emerging operators, in order to ensure France's position in high-growth markets
- Investing in disruptive technologies that will shape the future space landscape by better matching the outcomes of space research with industrial innovations
- Supporting stakeholders in space research with regard to their upstream power of innovation, the use of their data, and their operational capacities; strengthening their links with the space industry
- Directing investments towards proven user needs/growth markets

The French New Space ecosystem is increasingly active and comprises a wide variety of operators who are shaking up the established order. By combining the experience of established players with the inventiveness of newcomers to the sector, by drawing on its research and innovation strengths and its industrial capabilities, France must successfully rise to the challenge of space and its new frontiers.

The ambitions in numbers

+1

Reusable micro-mini launcher by 2026

+10

New services offered by operational constellations in 2030

+200

More public and private entities using spatial data

€1.5 billion
to increase the global market share of the French space sector on tomorrow's markets

Strategic priorities

1. Provide France, within Europe, with independent access to Space
2. Strengthen the French space industry in the field of constellations
3. Take strategic and sovereign positions on the new space markets
4. Support the excellence of French space research and innovation
5. Promote the duality applications

Tangible examples

Hybrid Propulsion for Space DEHYMOS – 250 kg micro-launcher

Headed by the startup HyPr Space, this project aims to develop a reusable hybrid-powered micro-launcher to reduce the costs of accessing Space. Using patented architecture, this technological innovation aims to commercialize a high-performance, economical and environmentally friendly thruster using recycled fuel.

KAYRROS Analyses of spatial data for energy, natural resources and the environment

Acquisition by the "French Tech Sovereignty" fund of a stake in the capital of Kayrros, one of the world leaders in the spatial observation of land assets. Kayrros uses all available data on a given industrial asset (satellite, IoT, mobile data, web, etc.) to provide the most reliable information on the status of the asset.

Objective: Explore the seabed

Strategy led by the Ministry for Marine Affairs, the Ministry of Higher Education and Research and the Ministry for Industry

The last unexplored frontiers

Key objectives

- Significantly increasing our scientific knowledge of the deep seabed, primarily by conducting offshore exploration campaigns
- Developing and strengthening a cluster of French manufacturers, competitive at the global level and capable of providing the equipment and services required for this scientific exploration.
- Sharing knowledge acquired during these exploratory operations

The deep sea, where depths exceed 200 meters, covers two-thirds of the Earth's surface. It is a dark, cold, highly pressurized universe, hostile to Humankind: only a small fraction of it has been explored. Yet it harbors very rich biodiversity and interacts with our climate. Understanding these environments will unleash some major scientific discoveries.

The ambitions in numbers

10

New industrial systems developed and used at sea

20

Scientific exploration campaigns at sea

€350 million
to invest in scientific knowledge of the deep seabed and in French industry.

Strategic priorities

1. Strengthen scientific research by launching a priority research equipment program dedicated to the deep seabed
2. Support innovation by launching at least one call for innovative projects specific to the deep seabed
3. Conduct exploratory missions to gather scientific knowledge of the deep seabed, by implementing innovative equipment provided by French manufacturers
4. Disseminate knowledge and lead outreach actions for the general public (reports, exhibitions, etc.)

Tangible examples

ECA Robotics Use of the UlyX drone to explore areas under AIFM contract

Controlled by IFREMER, UlyX is a new-generation drone capable of diving some 6,000 meters deep. It will be used operationally for the first time to explore areas allocated to France by the International Seabed Authority.

Deep Sea Glider

Underwater gliders make it possible to explore an area over an extended period, but they are currently restricted to a depth of 1,000 meters. This project will develop a glider capable of reaching 3,500 m deep and will use it to explore the area around the recently emerged underwater volcano off the coast of Mayotte.

Condition for success: Secure access to raw materials

Strategy led by the Ministry for the Ecological Transition and Territorial Cohesion, the Ministry for the Energy Transition and the Ministry for Industry

Key objectives

- Securing imports of raw materials that cannot be produced in the country, or otherwise building up stocks
- Attracting the raw material production sectors to our country
- Supporting the industrialization of alternative sustainable sectors
- Stepping up the recycling and re-incorporation of critical raw materials
- Providing support for training and public and partnership research

Securing supplies is a twofold challenge. On the one hand, the energy and environmental transition is driving the shift from an economy largely dependent on hydrocarbons to an economy based on other resources. Our productive systems must improve our national sovereignty by reducing their dependency.

The ambitions in numbers

x4

Quadruple the tonnage of recycled household textiles by 2025

2

million tonnes of recycled plastic by 2025

25%

less paper surplus to be recycled in 2025, and 50% less in 2030

€2.9 billion
to invest in sustainable supply levers that guarantee the reindustrialization of France and its sovereignty.

Strategic priorities

1. Improve sovereignty regarding critical metals, rare earths and magnets by reducing dependence on inputs, improving recycling circuits and relocating stages in value chain production
2. Meet the challenges involved with plastic: master the design of more recyclable products and in the absence of alternatives: develop more sustainable plastics and industrialize mechanical and chemical recycling to minimize the environmental impact of the 3.7 million tonnes of waste per year – which is mainly packaging
3. Wood and other bio-sourced products: structure, modernize and where possible develop an industrial tool (in linkage with upstream resources and downstream requirements) to satisfy national demand for secondary products as far as possible and to improve our trade balance by exporting processed products
4. Agricultural and agri-food inputs: mobilize French and European agricultural raw material supply chains in a sustainable and resilient way, and address possible market failures

Tangible examples

CARBIOS: Plastics enzymatic recycling demonstrator

2019 – CARBIOS and Toulouse White Biotechnology scale up an enzymatic waste and PET fiber recycling process. This project opens up prospects for international industrialization to massively recycle most plastics in a closed loop.

Les Tissages de Charlieu, Synergies TLC, TDV Industries, MAPEA, CETI: FIREX (industrial recycling channel for textiles)

The aim of this project is to remove the barriers to recycling textiles by massively developing sources, fraying technologies and the recovery of natural and synthetic fibers. The ambition is to process 20,000 tonnes of clothing, household linen and footwear (CHF) from 2024.

Condition for success: Secure access to strategic components, including electronics, robotics and smart machines

Strategy led by the Ministry of Higher
Education and Research and the Ministry
for Industry

Key objectives

- Doubling the production capacity of advanced electronic components
- Establishing a French offering for the design and integration of "Factories 4.0"
- Being at the forefront of global research (THz components, etc.)
- Training the necessary talents at all levels of qualification

To develop its industry, France must equip itself with the tools required for its transformation:

- Sufficient electronic component production capacity to secure the needs of French production facilities;
- French technologies to design, equip and operate the factories of the future.

The ambitions in numbers

x2

Doubling of French
semiconductor
production capacity

18,000

jobs created by 2024 in the
electronics sector

10,000

additional people trained in
electronics & robotics

€5.4 billion
invested to ensure the readiness of our industries to
transform and become less dependent on a handful
of foreign giants.

Strategic priorities

1. Support the industrial offering with projects that structure the sectors, calling on national and European funding
2. Secure a technological head start for new manufacturing technologies
3. Bolster training schemes to meet the workforce needs created by growth of the sector
4. Develop our production capacities by attracting large installations to overcome current dependency

Tangible examples

Installation of a megafactory for semiconductor components

Liberty project for the installation of a factory (megafab) at Crolles (Auvergne-Rhône-Alpes) for the production of electronic components using FD-SOI technology, an area of excellence of the European research and industry ecosystem.

Spearheaded jointly by STMicroelectronics and GlobalFoundries, this new industrial base in France constitutes a direct and significant contribution to the challenge of securing our value chains.

Condition for success: Develop talent by adapting training for the jobs of the future

Strategy led by the Ministry of National Education and Young People, the Ministry for Labour, Full Employment and Economic Inclusion, and the Ministry of Higher Education and Research

Key objectives

- Supporting the emergence of talent and speeding up the adaptation of training to meet the skills requirements of new sectors and future professions
- Supporting innovative initiatives in schools by investing in the educational innovation fund
- Training up to one million young people, job seekers and employees per year and preparing them for the jobs of tomorrow
- In 12 French departments, demonstrating the digital transformation of teaching practices to ensure the success of all students

To meet the growing needs for new skills at national level, the France 2030 plan is assisting the transformation of the training system, schools and higher education in the sectors deemed the most strategic.

The ambitions in numbers

1 million

people trained for the jobs of the future by 2030

120,000

teachers in schools and higher education incorporating digital technology.

€2.8 billion

to invest in education and training.

Strategic priorities

1. Improve knowledge of short, medium and long-term skills and employment requirements for the priorities covered by France 2030
2. Invest in the creation of new training courses that meet the needs of tomorrow, based on assessments of skills requirements
3. Make the accreditation of diplomas, learner pathways and career paths more flexible
4. Take advantage of new digital technologies to overhaul training methods

Tangible examples

A Battery Academy

Battery manufacturer Verkor has formed a consortium with 11 partners to develop new vocational training courses at all levels of study, from CAP (technical training certificates) to PhDs. Over 70 new or adapted initial training programs will be offered to students and 60 retraining programs will be offered to people in the workforce.

GenHyO

This project aims to structure the hydrogen sector in Occitanie via training in the hydrogen professions to meet the short-, medium- and long-term needs of local stakeholders across the entire hydrogen ecosystem (production, conversion, storage, distribution).

Condition for success: Master sovereign and secure digital technologies

Strategy led by the Ministry of Higher
Education and Research and the Ministry
for Industry

Key objectives

- In each strategic area, French and European operators must have at least one acceptable, functional solution that offers sufficient guarantees in terms of sovereignty.
- French operators must position themselves in emerging segments where the dominant positions have not yet been established (edge-cloud, 6G, embedded AI, etc.), to capture sufficient market share to ensure real competition.
- Digital players must enable and support the digital transition of all other economic operators, consumers and citizens.

Digital technology has seeped into all areas of daily life, from our communications and our leisure activities to our consumption and beyond. Yet the sector is still largely dominated by foreign operators. Our action aims to support startups and other French digital stakeholders to provide sovereign technical solutions that meet the expectations of French and European citizens and consumers.

The ambitions in numbers

x2	600	2,000	2,000
Double the market share of French stakeholders in the cloud	6G patent target	Number of additional AI graduates	qubits for useful quantum computers

€4 billion
to invest in transforming our training and
research ecosystem

Strategic priorities

1. Capitalize on France's scientific excellence in the field of quantum technology to fulfil our potential of becoming a leading technological and industrial player
2. Create a French and European technological alternative that makes France a sovereign economic power in the cloud
3. Develop expertise in the technological building blocks required for 5G and speed up the development of uses while meeting the requirements of 6G
4. Stimulate training, research and uses in artificial intelligence and its adoption by the whole of French society, in accordance with our values
5. Guarantee the security, environmental sustainability and availability of talent in all areas of digital technology (AI, cloud, telecoms, quantum computing, etc.)

Tangible examples

Hybrid Quantum Initiative

The program aims to (1) unite an ecosystem of developers and innovators around first-generation quantum processors known as NISQ (Noisy Intermediate Scale Quantum) developed by French and European startups, and (2) support the development of at least two competing sovereign solutions for universal quantum computers by 2032. A first NISQ machine from the startup Pasqal has already been selected and the process to select a second one is underway, to be made available to researchers in 2023.

Creation of an open-source European alternative to the hyperscalers' cloud platforms

Project led by OVHcloud, aimed at creating a completely open-source cloud software stack, ensuring a high level of interoperability and transparency. The project has a distinctly European flavor due to its participation in the IPCEI (Important Project of Common European Interest) Cloud program, involving twelve Member States and led by France and Germany, for a total public-private investment of around €5 billion.

Condition for success: Fast-track the emergence, industrialization and growth of startups

Strategy led by the Ministry of the Economy, Finance and Industrial and Digital Sovereignty and the Ministry of Higher Education and Research

Key objectives

- Supporting pioneering companies to implement their innovative project and ambitious growth strategy, creating economic and environmental value
- Creating 500 deeptech startups per year by 2030
- Fast-track the emergence, industrialization and growth of startups at 100 industrial sites per year by 2030
- Boosting the French and European champions of tomorrow: 100 French unicorns including 25 green unicorns (with a high environmental impact) and 10 decacorns
- Developing innovation in the regions: "Innovation for everyone and everywhere"
- Supporting R&D projects in industrial and service sectors on buoyant markets, contributing to the energy, ecological and digital transitions

The Innovation and Startups Committee (CISU) pools the resources assigned to structural support for innovation, growth and industrialization across metropolitan France and the French overseas territories. It complements the other components of the France 2030 plan and is implemented on a bottom-up basis, with no prior target themes but with the same requirement for excellence, risk-taking and selectivity in order to tackle the major economic and environmental challenges.

The ambitions in numbers

100 unicorns
including 25 green unicorns

500 deeptech startups per year

100 industrial sites per year

€4.2 billion
to support the emergence and growth of innovative players in France (excluding equity)

Strategic priorities

1. Deployment of enhanced resources for the innovation of companies at any stage of maturity, with selective mechanisms (competitive processes, calls for projects) and more general mechanisms (applications for aid), implementation of support tools to support startups in their development (e.g. Diags, IP strategies)
2. Support for deeptech – financing worth €3 billion (including equity)
3. Support for the industrialisation of startups – financing worth €2.3 billion
4. Support for growth and hypergrowth (e.g. equity, Scale-Up Europe)

Tangible examples

SEDENE PROJECT FROM GREENMETRICS – SUSTAINABLY MANAGING YOUR CARBON FOOTPRINT

Greenmetrics is a French startup in operation since 2020, with the main mission of measuring and then reducing corporate digital environmental footprints. Greenmetrics has developed an SAAS platform and technologies that help companies and administrations automate access to data and reduce the environmental impacts related to their digital activity. The SEDENE project will speed up the decarbonization of digital activities in companies and offer relevant solutions to sustainably reduce their environmental footprint.

INNOVAFEED BSFOOD – INDUSTRIAL PRODUCTION OF INSECT PROTEIN

InnovaFeed generates insect protein from agricultural co-products available in France. Its products are marketed as ingredients to support local, resilient and sustainable food sectors. InnovaFeed now wants to speed up the development of products to feed people. InnovaFeed's objective is to develop and commercialize the most relevant applications from a nutritional and environmental point of view by 2023.

Condition for success: Build on the excellence of our higher education, research and innovation ecosystems

Strategy led by the Ministry of Higher
Education and Research

“The necessary breeding ground to nurture the objectives of France 2030”

Key objectives

- Professionalizing studies and providing lifelong training for informed citizens
- Strengthening the position of research organizations in their role of informing national policy, in coordination with universities at regional level
- Speeding up the transformation initiated with regard to deeptech, in the areas of pre-maturation, transfer and development of innovation
- Reasserting the role of the human and social sciences (HSS) in analyzing issues and supporting decision-making
- Strengthening the autonomy and performance of our higher education and research institutions
- Making France the leading country and a trailblazer among European universities

In an increasingly complex world that is facing unprecedented transitions, we must draw on the excellence of our higher education, research and innovation system to train people for the professions of tomorrow, develop and share cutting-edge research, ensure the transfer of its results and develop understanding of the future.

The ambitions in numbers

€3 billion

For emerging and strategic
research for our economy

€4 billion

to invest in transforming our training and
research ecosystem

Strategic priorities

1. Continue to shape the research landscape to meet the scientific challenges of France 2030
2. Develop the levers for action and resources specific to higher education and research institutions, to support their strategy
3. Prepare stakeholders in French higher education and research for changes in the European landscape in this area
4. Develop an HSS strategy to strengthen their role in society

Tangible examples

CNRS: MoleculArXiv

MoleculArXiv is a research program at the heart of the digital and ecological transitions, aiming to develop the storage of data on DNA or its derivatives, a radical technological solution for the long-term storage of increasingly huge quantities of data. This exploratory Priority Research Program and Equipment (PEPR) is supported by the CNRS, in partnership with: INRIA, University of Strasbourg, Université Paris Sciences et Lettres, University of the Côte d'Azur.

University of La Rochelle ExcelLR

With the ExcelLR project, in partnership with CNRS, IRD and Ifremer, the University of La Rochelle is consolidating its emblematic site specialized in “the sustainable coastline” by developing specialized courses and further specializing its research. This assertive standout strategy, firmly anchored in the coastal region, has led to the grouping of all its laboratories and master’s and doctoral programs within a new Institute and to its taking the lead on this issue within the European Alliance, made up of nine universities.

Learn more about
all the measures for France 2030
at **france2030.gouv.fr**

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