RÉPUBLIQUE FRANÇAISE
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FRANCE 2030

With France 2030 and the ANR,

research is bringing the future closer

Live Better

Produce Better

Understand the World Better

Preparing for the Future through Research and Innovation

With a budget of 54 billion euros, the France 2030 investment plan is putting France on the path to a carbon-free and strategically autonomous future. As part of its government mandate, the ANR has awarded nearly 9 billion euros in funding to research and training projects of international stature.

In addition to administering the Investments for the Future Programme (PIA) in the field of higher education and research, the ANR has now been mandated by the French government to help implement France 2030. Its responsibilities include managing project selection, negotiating contracts, and monitoring and assessing most of the actions and training, research and equipment programmes (PEPRs) implemented as part of this ambitious investment plan.

Carbon-free hydrogen, artificial intelligence, healthy and sustainable foods, training for the jobs of the future, eHealth, quantum technologies, carbon-free transport… Since 2021, the French government has entrusted the ANR with a budget of 9 billion euros to oversee projects from start to finish in the fields of the future. These investments will give higher education and research professionals the tools to effectively address the ecological challenges of tomorrow and enhance France's appeal.

> "Research lays the groundwork for discoveries that will address the societal challenges of the future. By allocating 9 billion euros to research, France 2030 is putting it at the centre of its strategy, right alongside structuring the higher education ecosystem and technology transfers."

Bruno Bonnell, Secretary General for Investment in charge of France 2030

With 45.5 million euros in funding from France 2030, the "Origins" PEPR brings together 34 public research institutes and universities.

Promoting Breakthroughs in Basic Research

As part of France 2030, the French government has allocated 3 billion euros to research programmes (PEPRs) led by experts at public research institutes and universities. The objective of these PEPRs is twofold: (1) to overcome the scientific and technological hurdles hindering socioeconomic, health, and environmental transformations (the "national acceleration strategy" PEPRs), and (2) to generate disruptive innovations in emerging industries (the exploratory PEPRs). The 47 programmes supported by the ANR cover fields as varied as they are groundbreaking. One of them, "MoleculArXiv", explores the use of DNA for massive data storage. "Origins" brings together researchers from 10 different fields to better understand how planets are formed, shed light on the origins of life on Earth, and determine under what conditions alien life may develop.

Moving Faster Towards a **Carbon-Free** France

France 2030 should help reduce industrial greenhouse gas emissions by 35% by 2030.

With 50% of its budget devoted to decarbonisation, France 2030 aims to bring about the lasting economic transformations needed to achieve carbon neutrality in 2050. While this goal drives a majority of the actions overseen by the ANR, it is particularly central to the PEPRs: more than 30 of the 47 PEPRs include the green transition in their roadmap.

To speed up decarbonisation, France 2030 is supporting disruptive innovations in key sectors, including carbon-free hydrogen, sustainable mobility, and agroecology. Its "Decarbonisation of Industry" PEPR exemplifies this ambition. With 70 million euros in funding, this France 2030 programme supports the development of innovative and competitive technologies that will help reduce the industrial sector's carbon footprint, which still accounts for 20% of French CO_2 emissions.

The programme places scientific research at the centre of France's industrial transformation by giving laboratories tools to develop technologies and solutions—e.g., energy diversification, process transformation, and optimised production systems—that manufacturers can then adopt and roll out at scale.

Supporting the Training and **Jobs of the Future**

Training will be the driving force behind France's societal transformation in areas such as the environment, digital technology, health, food, energy, and culture. France 2030 has invested nearly 1.5 billion euros to meet the skills needed in new industries.

France 2030's commitment to supporting human capital culminated in the call for expression of interest "Skills and Professions of the Future". This initiative aims to more quickly adapt training programmes to the jobs of tomorrow by harnessing the key drivers of transformation: pedagogical innovation, vocational appeal, and a more diverse pool of trainees. To date, it has supported over 180 projects and spurred the creation of 34,000 new spots in diploma courses.

The call for proposals "Excellence in all its Forms" also promotes academic excellence. Boasting a budget of 800 million euros, it has helped fund 46 projects led by higher education and research institutes all over France. Its goal is to help institutions implement ambitious local transformation projects tailored to the needs and socioeconomic realities of the surrounding area.

Campus Versailles, winner of the call for expression of interest "Skills and Professions of the Future", is helping to grow visibility and skills development in the heritage and crafts professions.

Live Better

France 2030 aims to promote access to healthy and sustainable foods, innovative therapies, and groundbreaking cultural and creative content. Its investments aim to bring about lasting, positive transformations to the way we live.

From Farm to Fork: Eating Better Tomorrow

"Legume Proteins", a call for proposals with a budget of 30 million euros, aims to overcome obstacles in agricultural production and legume processing while also enhancing the appeal of these foods to consumers. A source of protein and fibre, legumes (beans and lentils) are as good for you as they are for the planet: their carbon footprint per 100 grams is up to 200 times lower than that of beef. Moreover, the roots of leguminous plants help fix atmospheric nitrogen in the soil.

"JACK", the winning project, works with Michelin-starred chefs to come up with legume-based gourmet recipes that are both creative and innovative. Sixteen public and private partners, over 50 researchers, several hundred consumers, as well as food labs, training centres and farm networks have stepped up to promote these superfoods.

> "I've always had a fascination for combining science and cooking. With the 'JACK' project, we're creating healthy, flavourful dishes that meet the dietary needs of our time."

François-Xavier Bee,
Chef-Instructor at the Chamber of Commerce and Industry of Maine-et-Loire, and Associate on the "JACK" project

Transfo
All Area

Produce Better

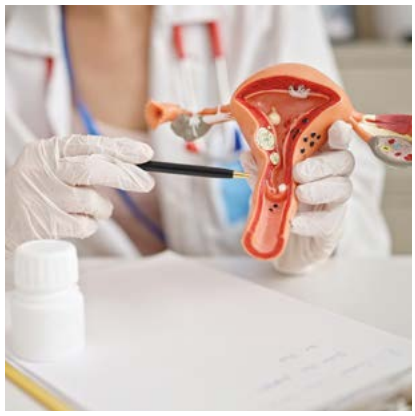
To help achieve carbon neutrality by 2050, France 2030 is assist industries with their transition. The plan supports disruptive inno emergence of more environmentally friendly industries.

Storing Energy and Decarbonising Transport

The French government's commitments to reduce greenhouse gas emissions and preserve biodiversity call for a radical transformation of France's energy production and manufacturing. The strategy for the transport industry is clear: undertake the mass electrification of transport. That is where the "Batteries" PEPR comes in. With 50.5 million euros in funding over 7 years, this PEPR aims to speed up the development of next-generation batteries, primarily for cars, but for other key industries as well, including aeronautics, the space sector, and even stationary energy storage.

Understand the World Better

Research has a vital role to play in helping us confront the current health and socioeconomic crises. France 2030 supports projects that demonstrate excellence by pushing the limits of our knowledge and proposing disruptive innovations.



Endometriosis and Infertility: Better Insights for Better Treatments

Between 1.5 and 2 million women in France suffer from endometriosis. This chronic condition, which is still poorly understood and has no known cure, is one of the leading causes of female infertility. This led the French government to launch a national strategy that includes the "Women's Health, Couples' Health" PEPR. With a budget of 30 million euros over 5 years, this PEPR studies endometriosis and its associated physiological and psychosocial risks (infertility, pain, fatigue), while also exploring infertility more broadly.

The Inserm-led programme will create one of the world's largest epidemiological databases dedicated to endometriosis. Comprising 6 national cohort studies, it will shed light on the frequency, risk factors and consequences of the disease. The PEPR will also conduct research on the genetic and environmental causes of infertility, and explore potential treatments.

"Affecting nearly 10% of women of childbearing age, endometriosis is a leading cause of infertility today. This PEPR brings together researchers in the fields of biology, epidemiology, and the social sciences to broaden our understanding of the causes and mechanisms of infertility and generate therapeutic breakthroughs."

Jean Rosenbaum,
Research Director at Inserm
and PEPR Scientific Coordinator

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The research conducted in this programme focuses on the chemistry and life cycle of batteries, paths to reduce the use of critical raw materials, monitoring battery health and charging, and harnessing digital technology and artificial intelligence in the battery design process. The "Batteries" PEPR thus aims to ensure France's strategic autonomy in this future-critical industry.

"Over 35 research teams, assisted by a hundred or so young researchers, are working towards a common goal on this PEPR: develop higher-performance, more reliable and more durable batteries that will contribute to France's decarbonisation effort."

Hélène Burlet, Patrice Simon,
Scientific Directors, and **Mathieu Morcrette,**
Assistant Director of the "Batteries" PEPR

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FRANCE 2030

€17 Billion
administered by the ANR*
from 2010 to 2023

"The ANR, which has overseen the Investments for the Future Programme (PIA) in the field of higher education and research since 2010, has been mandated by the French government to help implement France 2030. By supporting the targeted actions of this ambitious national plan all while maintaining our generic call for proposals, the ANR is more committed than ever to supporting scientific communities."

Thierry Damerval,
President and CEO of the ANR

9,244
theses funded**

1,747
projects funded*

15,462
patents filed**

100,000+
publications*

* From the launch of the Investments for the Future Programme (PIA) in 2010 to 2023 | ** From 2010 to 2022 (self-reported values)

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