Integrated Annual Report

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2022



Truly INNOVATIVE

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Integrated Annual Report 2022



Paul-Joël Derian

Chief Sustainable Development and Innovation Officer, Head of Avril Development Incubator

Truly innovative

Innovation serving the agricultural, food, and environmental transitions

Innovation has been in Avril's genes since the company's creation, whether in terms of strategic orientations, investments, or the development of new solutions to meet the challenges of transition. Today, it lies at the heart of its development strategy. Anticipating major trends and converting them into targeted programs enables the Group to generate new growth opportunities in each of our four main business areas: Avril Oilseed Processing and Renewable Energies, Avril Specialties, Avril Consumer Goods, and Avril Solutions for Agriculture.

Confronted with the challenges of the agricultural, food, and environmental transitions, our ambition consists in accelerating Avril's innovation potential, federating internal and external expertise, and developing new growth drivers creating value for the oilseeds and protein sector and for Avril. This also involves anticipating the major trends related to the Group's business lines.

As a player in the agricultural transition, Avril contributes to developing agricultural models towards more sustainable and regenerative practices by elaborating new solutions for the vegetable and animal sectors.

As a key contributor to the food transition, the Group is developing new specialty protein ingredients derived from vegetables and consumer products. The objective is to address changing diets, reduce the environmental footprint of our food, and anticipate global population growth leading up to 2050.

As an environmental transition stakeholder, significantly reducing the carbon impact of our businesses is a priority for Avril. We are contributing to decarbonizing the industry, notably through the development of low-GHG biofuels and innovative solutions in the field of sustainable chemistry. Avril is endowed with a strong culture of innovation that is a source of satisfaction for all of the Group's employees and contributes to the daily advancement of its purpose: "Serving the Earth".

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Hélène Taboury, Béatrice Germain and Clément Tostivint

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Agence Heidi

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	A DIVERSIFIED AND EFFICIENT ECOSYSTEM	SUSTAINABLE INNOVATION P.6	88	
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A DIVERSIFIED AND EFFICIENT ECOSYSTEM

An agile internal organization

- Decentralized innovation teams at the main sites of the Group's business units, each working to develop its own activity:
 - Product improvement and development
 - Client support
 - · Applied know-how
 - Process development and support
- Innovation platforms responsible for launching and managing long-term innovative programs generating future growth drivers. Coordinated by Avril's main innovation managers, these platforms are structured around the three transitions included in Avril's strategic plan:
 - Agricultural transition
 - Food transition
 - Environmental transition
- A corporate team dedicated to providing methods and expertise and to supporting the innovation teams of Avril's business units and innovation platforms:
 - Scientific Division
 - Innovation Management, Performance
 and Marketing Division
 - Process and Biotechnology Innovation Division
 - Intellectual Property Division



The Avril Development incubator, to allow time for new activities originating from innovation projects to

from innovation projects to develop prior to joining one of the Group's four main areas of activity.



The French Oilseed Strategic Action Fund (FASO), a fund designed to finance innovation in the oilseed and protein crops sector, managed by Sofiprotéol.



Darwin, the Group's intrapreneurship program, promoting the entrepreneurial spirit and the most disruptive ideas of employees. This participative innovation program focuses on identifying, selecting, and accelerating the most promising projects via a six-month "start-up" process.



A Scientific and Technical Council bringing together a dozen key players from

bringing together a dozen key players from the world of research and industry, whose mission consists of informing, guiding, and challenging Avril's positions on innovation.

PROJECTS FROM THE DARWIN PROGRAM EXPEDITED SINCE 2019

An external ecosystem of high added value designed to strengthen the Group's capacity for innovation

Framework partnerships with academic entities



INRAE National Research Institute for Agriculture, Food, and the Environment

INRAE, with whom Avril signed a six-year framework contract in 2021 covering basic research and knowledge transfer in the fields of human nutrition, animal welfare, and sustainable agronomy.



The Joint Laboratory (LabCom) launched in 2022 between the CNRS of Nancy in Meurthe-et-Moselle and Avril, the purpose of which is to explore the potential of oil-protein seeds in the field of low environmental impact refining.



THE INTERACTIONS-TERRITORIES AND TRANSITIONS CHAIR AND THE TRANSITIONS OF AGRICULTURAL TERRITORIES CHAIR

These two chairs to which the Avril Foundation contributes, help territories analyze and evaluate the agricultural and food transitions affecting them.

ALLIANCE H@RVEST

Supported by Sofiprotéol, since 2021 this chair has been working on new digital uses for the agricultural world.



In 2021, Avril signed a partnership with UniLaSalle to jointly conduct a three-year research program focusing on sustainable livestock farming and animal welfare.

Collaborations with technical institutes



IMPROVE

Industrial Technical Center specialized in the study of fatty substances and related products, with which Avril collaborates in developing new products and innovative processes.

A business unit of ITERG, a globally recognized technical center for vegetable proteins. Avril was a founder and has been a partner since 2013. The Group entrusts it with a considerable portion of its protein-related R&D projects.



A platform dedicated to green chemistry, biotechnologies, and to hosting innovative players in these fields. Avril located its biotechnology R&D activities and Evertree, its start-up dedicated to developing biobased materials, at Pivert's premises. In 2022, ITERG and PIVERT pooled their expertise in vegetable-based chemistry by creating The Green Chembooster Alliance.



EURONUTRITION

An expert laboratory in animal nutrition and health developing and offering new analysis methods for the animal sectors.

Experimental research station devoted to animal nutrition based in Sourches in the Sarthe region, whose mission is to advance knowledge and test new solutions for the future and to improve the performance of monogastric farms.

Competitive clusters bringing together an ecosystem of public and private players in the same region around a particular innovation theme



B4C

Federating 390 industrialists, research centers, and higher education institutions to make the Greater West of France a more intelligent food territory.

Reference network for the bioeconomy in France and internationally, whose objective is to establish France as one of the world leaders in biomass exploitation.

Venture capital funds, investing in the most innovative start-ups in their fields



Launched by Avril and other key players in the food industry in 2014, Capagro is the leading European venture capital fund investing in agri-food tech start-ups for smarter farming and better food.



Sofinnova Partners, Europe's leading life sciences venture capital firm, dedicated a fund to backing start-ups leveraging biotechnology to innovate in the agriculture, food, and biomaterials sectors.



Specialized in accelerating start-ups in the emerging alternative protein sector, this early stage seed fund with global reach invests in the most innovative start-ups in this promising field through three hubs: New York, Singapore, and Paris.

SUSTAINABLE INNOVATION

INSIGHT

A new organization accelerating innovation and growth

Over the past three years, Avril undertook a process of transforming its innovation in order to promote the disruptions necessary to meet new social and environmental expectations. Under the impetus of the Sustainable Development and Innovation Department, seven innovation themes were given priority thanks to the mobilization of all the Group's business units and the main governance bodies. Firmly focused on its clients needs and on the necessity of bringing environmentally friendly solutions to the market, this organization seeks to implement the conditions necessary for the emergence of new growth drivers for the Group by:

- Promoting cross-functionality between the Group's various activities and business units;
- Fostering internal synergies through the launch of ambitious projects mobilizing the best expertise of the innovation teams;
- Mobilizing the Group's external technical and scientific ecosystem as a catalyst for our projects.

Focused on solving the major challenges in each of our areas of activity, these platforms are designed to identify the new challenges of the future and to introduce innovative, sustainable, and profitable solutions to the market for Avril and the sector.



Sophie de Batz Head of Steering, Strategic Marketing, and Innovation Performance



7 priorities

for the future addressed in Avril's innovation platforms



7 INNOVATION PLATFORMS SERVING TRANSITIONS

This year, the experts working in seven platforms, in the service of the three transitions, defined the major priority innovation topics needed to accelerate the agricultural, food, energy, and environmental transitions, and prepared the implementation of the corresponding action plans.

AGRICULTURAL TRANSITION

- $\boldsymbol{\cdot}$ Solutions for a more environmentally friendly agriculture
- Solutions for sustainable livestock farming
- $\boldsymbol{\cdot}$ Adaptation to climate change

FOOD TRANSITION

- Alternative proteins and new natural ingredients
- Alternative products for a more natural, nutritious, and personalized diet

ENVIRONMENTAL TRANSITION

Biofuels

· Sustainable chemistry and biomaterials



INNOVATING IN THE SERVICE OF AGRICULTURAL TRANSITION

Avril innovates for an agriculture evolving its practices in order to reduce its impact on the environment, capable of adapting quickly to climate change. A more sustainable, more resilient agriculture, to better feed the earth, people, and animals. An overview of the progress made in 2022, together with the projects carried out within the three innovative platforms in support of agricultural transition: solutions for more environmentally friendly agriculture, ways to ensure sustainable livestock production, and adaptation to climate change.

Reducing the impact of agriculture on the climate

Approximately 80% of greenhouse gas emissions for the scope of Avril's carbon footprint are linked to the purchase of agricultural raw material. It is therefore crucial to play a role in reducing the environmental impact of the agricultural sectors in question. Supporting agricultural practices that reduce carbon emissions or store carbon in the soil is one example.

A crosscutting community was created focusing on the theme of agricultural carbon. This community brings together experts working on existing initiatives within the Group. Its purpose is to consolidate our internal skills on this complex and formative subject, to leverage our collective intelligence in order to advance our current projects with a common vision, and to identify future innovative opportunities.

SAIPOL STEPS UP THE OLEOZE APPROACH

Saipol

€43/ton

€43/ton of seeds average

bonus with OleoZE in 2022

Created in 2020, OleoZE, an online purchasing solution for sustainable oilseeds, remunerates farmers for reducing GHG emissions and storing carbon in the soil. The rapeseed and sunflower seeds derived from these sustainable practices are then used to produce low-carbon biofuels. This represents a high value-added product that Saipol provides to its customers who are committed to reducing their climate footprint. The precise evaluation of each farm's methods results in a personalized calculation of the bonus available to them. In 2022, this bonus amounted to an average of €43 per ton of seed.



	2020	2022
Contracted tonnage	77,000	240,000
Equivalent in hectares (indexed on contracted volume)	26,000	73,000
Average GHG bonus (euros per ton of seeds)	25	43



Agdatahub announced its second round of financing at the 2023 International Agricultural Show

AGDATAHUB, CONFIDENTLY SHARING AGRICULTURAL DATA

In 2022, Avril acquired a stake in Agdatahub, a leading technology platform for exchanging agricultural data. The objective: interconnect 380,000 farms with their 85,000 partners in France, and expand the massive use of agricultural data within a sovereign framework built on trust.

Agdatahub offers two core solutions for the various agricultural sectors and their partners:

- Agritrust: A solution for managing farmers' consent to the use of their data, Agritrust is based on the very first digital agricultural identity developed in co-innovation with Orange Business Services and the IN Groupe.
- API-Agro: The leading platform for exchanging agricultural data across multiple sectors, acting as a trusted third party between the owners and users of agricultural data.

These two solutions meet the needs of agricultural players in terms of data sharing for the purpose of innovation beneficial to the agricultural sector. They also enable meeting consumer demand for improved transparency. Through this support, Avril hopes to support the development of use cases promoting the sustainability of agricultural practices, such as OleoZE.

NEW BIOSOLUTIONS FROM TERRIAL

In March 2022, Terrial finalized its acquisition of Amendis, a business unit of the Olmix Group specialized in organic fertilizers for the agricultural sector, in order to accelerate the availability of alternative biosolutions to synthetic inputs.

In addition, Terrial joined forces with Afyren in an exclusive partnership to launch FortiK+ in 2022, a new potassium fertilizer derived from the production of biosourced organic acids obtained after a natural fermentation process using sugar beet co-products. Certified Organic Agriculture, this new fertilizer meets Terrial's commitment to providing sustainable fertilization solutions by developing quality bioresources, traced and produced in France.

A dozen trials were carried out over the last two years with the University of Nancy, RITTMO (Research & Development Center for fertilizers and agrosystems quality) and SILEBAN (Vegetable Investment Company and market gardening of Basse Normandie) in field crops and market gardening.

The results, with better dry matter yields, confirmed the efficiency and interest of the product, as well as its nutritional qualities and better taste thanks to improved sugar synthesis and storage quality.



Terrial collaborator, Beaupréau plant, Maine-et-Loire, France

INNOVATIONS FOR MORE SUSTAINABLE LIVESTOCK FARMING

In 2022, Sanders continued its path towards non-GMO animal feed, while reinforcing its commitments to non-deforesting soya, by signing the Feed Manufacturers' Manifesto in February as part of Duralim. Under the Manifesto, Sanders and the other signatories voluntarily commit to sourcing 100% of their soya from guaranteed non-deforesting sources by 2025, with intermediate levels of 50% of their needs for 2023 and 75% for 2024.

Significant R&D projects are also underway to reduce enteric fermentation emissions accounting for approximately 35% of agricultural GHG emissions in France. Thanks to its nutritional expertise and by choosing formulation strategies, MiXscience can reduce enteric methane production by 5% compared to a "standard" feed. Another way is being explored to develop active ingredients added to the feed, in order to achieve a 30% reduction in enteric methane emissions, with a satisfactory animal welfare level.

mix scier



100%

of soya sourcing are guaranteed to be deforestation-free by 2025



- Lumigard Most is an original, natural, vegetable combination of fatty acid esters with a specific galenic formula. It is used to limit the colonization of pathogens and improve the intestinal health of poultry.
- **Coverost Switch** is a natural, vegetable-based solution for combating coccidia, a parasite associated with poor poultry health and welfare. MiXscience's R&D team identified natural active ingredients that are more effective than commonly used coccidiostats, locally sourced and sustainably produced.
- Metalixir Quo is a blend of vegetable extracts that improves immune maturation in piglets while inhibiting intestinal inflammation.



INSIGHT



Raphaëlle Girerd Director of Innovation and Sectors at Sofiprotéol and of the platform Adapting to climate change





Accelerating climate change adaptation

2022 was a year spent exploring innovation trajectories capable of helping the sector adapt rapidly to the consequences of climate change. We collectively worked on a roadmap with the innovation and strategy teams and the business units. Thematic priorities were identified to ensure our upstream agricultural sector could cope with these upheavals.

First and foremost, it would appear to be a priority to support plant breeding and the development of varieties adapted to a new climate with improved water use efficiency and physiological characteristics that are less sensitive to heat. In particular, we rely on inter-professional support mechanisms for oilseed and pulse breeding in which Sofiprotéol participates through the French Oilseed Strategic Action Fund (FASO) (see page 18), the SELEOPRO Fund, the Innovation Fund for the Competitiveness of Pulses, the Innolea1 research structure, and the PlantAlliance² consortium. Within the framework of this public-private research consortium led by INRAE, a cycle of scientific conferences was held for seed companies and academic research on the subjects of resilience, water stress, temperature increase, and CO2 emissions. This conference cycle culminated in the launch of a first call for projects on this theme in order to introduce adaptation solutions.

Climate change also raises the issue of integrating new types of crops into the rotations. For this reason, we are looking at the opportunities created by climate change for the potential development of new crops of interest to our oilseed and protein industries. Modified early maturities or accelerated production cycles may be an way for developing intercrops that we should study. Conversely, we are also studying crops that could be put at risk due to climate change.

A more resilient agricultural model will incorporate new crop practices, in terms of carbon storage, biodiversity protection, and GHG reduction prospects. The questions are manifold: what are these new, more resilient production models? What economic models can be developed to serve these crucial objectives while at the same time providing economic added value to farmers, as is already the case today with OleoZE (see page 8)?

Finally, we need to study how our upstream agricultural sector can be supported in managing increased risks, particularly those linked to drought but also to changes in practices. Anticipating risks will be key, particularly in managing water resources, as well as the ability to deal with much more frequent climatic hazards.

Adapting our upstream agricultural sector, the first link in the value chain, will be a major challenge. Avril would like to be able to anticipate and support this at its level, with the support of Sofiprotéol, in order to relate these challenges to those of our entire ecosystem.



1 Research institute committed to improving sunflower and rapeseed plants

2Consortium focusing on agroecology

INNOVATING FOR THE FOOD TRANSITION

Human nutrition is undergoing major changes, with profound transformations in people's consumption habits: vegetalization of food, search for more naturalness, promotion of local products, and short distribution channels. Feeding people also represents a global sustainability issue, since by 2050 there will be 10 billion people on the planet and food needs are expected to increase by 60% between 2010 and 2050, with only 10% more arable land available.

To help meet this dual challenge, two cross-functional innovation platforms were launched in 2022. The first is dedicated to developing new vegetable-based ingredients for the food industry (B2B³ challenge). The second platform focuses on developing consumer products for a healthier, more vegetable-based diet (B2C³ challenge). The two platforms are interlinked so that ingredients and finished products benefit from an integrated value chain.

3 The B2B challenge concerns commercial transactions with another company, and the B2C challenge concerns commercial transactions with individual customers

FOOD NEEDS WILL INCREASE BY 60%

BETWEEN 2010 AND 2050

INSIGHT

Amandine Perez Head of the Vegetable Proteins for Human Consumption Program and Head of the Alternative Proteins and New Natural Ingredients Platform

A collective committed to the food transition

Convinced of the complementary nature of the B2B and B2C food businesses implemented in the Group's various activities, the two platforms were combined with the same ambition: to contribute to the food transition. Their synergy is intended to encourage collaboration, pool skills and expertise, and generate new disruptive ideas. The innovation, strategic marketing, and business development teams of the main food-related business units, including Costa d'Oro, Lesieur, Lesieur Cristal, Oleon, Vegini, and Vivien Paille, are working closely with the Group innovation team with the aim of rapidly delivering innovative, sustainable solutions for industrial clients and consumers.

The platform dedicated to new vegetable ingredients has given priority to work undertaken for over five years on the development of protein-rich vegetable ingredients for human consumption. Adding value to the co-products of the protein extraction process represents a major challenge with a view to building profitable, sustainable business models. The Group also plans to develop the market for natural emulsifiers, which is currently being pursued by its business unit Oleon. Other, more exploratory work is under consideration to add value to the various fractions of oilseeds and thus develop new outlets creating sustainable and profitable value for the sector.

The platform dedicated to developing consumer products serves Avril's commitment towards transparent, healthy, tasty, and practical food products accessible to all.

Three priority areas were identified: the health benefits of oils, the vegetalization of food through the formulation of vegetal core meal products, and responding to the specific needs of new niche markets.

The two platforms are naturally highly interconnected to ensure new vegetable ingredients find their place in high-quality finished products within an integrated value chain, as promoted by Avril's circular model for the past 40 years.

Numerous developments in the field of vegetable proteins

The platform dedicated to new vegetable ingredients for the food industry intends to develop, produce, and market a wide range of vegetable protein ingredients based on rapeseed, sunflower, and legumes. This will be achieved through three drivers: internal R&D, alliances with strategic partners, and the acquisition of specialized companies.

As such, in 2022, Avril took over Vivien Paille Ingrédients, with the aim of developing high value-added legumebased ingredients for the food industry and consumers.

The year 2022 also saw the acquisition of Vegini, an Austrian company developing, producing, and marketing a range of dishes based on pea proteins. Vegini's technological and application expertise in vegetable proteins for human consumption is strategic for Avril, and complementary to that of Vivien Paille and Prolein / Olatein, an ambitious industrial project in Dieppe scheduled to come on stream in 2022.

Prolein-Olatein collaborator, Dieppe plant, Seine-Maritime, France of high oleic acid oils produced in the ZENITH project in 2022

PROLEIN/OLATEIN, IMPLEMENTATION OF A WORLD INDUSTRIAL FIRST

In partnership with DSM, the world's leading supplier of solutions and ingredients for the food industry, Avril built a unique industrial site in Dieppe specifically for processing rapeseed protein for human consumption: Prolein Olatein. This world industrial premiere welcomed its first rapeseed in February 2022 to carry out commissioning tests of the cold pressing and protein extraction facilities. In October, the first proteins were produced enabling the commercial launch of Vertis CanolaPRO© by our partner DSM in December. This innovative ingredient enables food and beverage producers to develop plant-based products offering complete proteins free of major allergens.



Oleon, more sustainable processes for a healthier diet

In order to meet consumers' demands for less processed food, Oleon is developing new methods and producing new forms of natural emulsifiers from raw material such as rapeseed, sunflower, and palm oil. This type of innovation also resulted in implementing a new process gradually replacing the standard high-temperature, high-pressure, energy-intensive oil hydrolysis technology.

The ZENITH project, running since 2016, aims to obtain a range of fatty acids for the food sector more natural and of better quality, thanks to a new enzymatic process creating ester bonds at low temperatures, between 50° and 70°. This led in 2022 to the creation of an operational unit at the Oleon site in Venette, enabling the processing of pre-industrial volumes of high oleic acid oils, mainly from rapeseed and sunflower.

Innovating to better serve consumers

The innovation platform targeting finished products serves Avril's commitment to transparent, healthy food that is accessible to all, while taking part in the evolution of fast and safe consumption. Three priority areas were defined: the health benefits of oils, the presence of vegetable protein at the center of the meal, and the response to the specific needs of seniors and athletes.



100%

In 2022, packaging innovation enabled the achievement of a major objective: to make all Lesieur brand packaging 100% recyclable

Lesieur, committed to innovation

Lesieur structured its approach to innovation around six priorities: naturalness, nutrition for health, practicality, new distribution channels, growth markets, and new categories, all subject to a primary objective: sustainability.



OLIVE OILS WITH ZERO PESTICIDE RESIDUE

In 2022, a significant first step was taken towards achieving this objective with the Puget brand, which launched an alternative between conventional and organic, featuring an extra virgin olive oil with zero pesticide residue, recognized as Flavor of the Year 2023. This oil contains less than 0.01 mg / kg on a list of 176 pesticides analyzed by an independent laboratory accredited COFRAC. It combines responsibility and quality, meeting the Puget standards, a virgin oil extracted cold within 24 hours of harvesting.

FOOD PACKAGING AIMING FOR ZERO PLASTIC

In terms of sustainability, Lesieur relies on packaging innovation enabling the achievement of a major objective: to make all Lesieur branded packaging 100% recyclable. Innovation is now focused on alternative and biodegradable materials, moving away from single-use plastic by 2030.



Frédéric Bredon Director of Innovation and Quality at Lesieur and of the "New offers for a more natural, nutritious, and personalized food" platform

INSIGHT

Innovation will either be collaborative or not

Innovation according to Lesieur is achieved in proximity with its ecosystem and consumer needs. In 2022, we shifted the emphasis by creating a Task Force bringing together R&D and Marketing, centered around a new process and an agile management tool. We structured an open innovation, based on knowledge sharing, around a diversified ecosystem combining academic research, technical centers, and our internal expertise. Because innovation is worthwhile only if its added value is perceived by consumers and provides the Group with a competitive edge.

Our strategy is built on three pillars: understanding and defining new territories of opportunity, incubating innovative projects involving a strong technological component as well as incremental changes to our products, and finally developing "design thinking" - a global design method centered on the user, to better anticipate and renew the client experience.



INNODAYS

Innodays brings together, twice a year, approximately fifty Lesieur employees from different areas of the company including Marketing, Research & Innovation, Sales, Communication, Purchasing, Logistics, and others, as well as representatives of various entities of the Group, Sofiprotéol, Terres OléoPro, as well as external experts. In 2022, the teams focused on two strategic areas related to oil and the development of new markets. These daylong creativity sessions included trend presentations, expert points of view, workshops, and group brainstorming sessions. At the end of the day, the teams presented their two most important ideas, leading to concepts that were tested through a quantitative consumer study.



INNOVATING IN THE SERVICE OF ENVIRONMENTAL TRANSITION

KI	

Innovation at Avril is also oriented towards the energy and environmental transition. Without compromising our ability to produce sufficient and healthy vegetable-based food, the objective is to identify solutions for the decarbonization of transport and a more sustainable chemistry. Two platforms are working to develop future renewable energies on the one hand, and green chemistry and biomaterials on the other.

5% to 6%

SUSTAINABLE, NON-FOSSIL AVIATION FUELS SHOULD ACCOUNT FOR 5% TO 6% BY 2030

Accelerating the decarbonization of transportation

INTERCULTURES, A FUTURE SOLUTION FOR DECARBONIZED TRANSPORT

Biofuels are one of the solutions in the energy mix contributing to meeting the objectives of decarbonizing transport, without affecting the food sovereignty of States. While rapeseed production can meet both food and energy needs, crop innovations are emerging to enhance biofuel production.

Starting January 1, 2022, France made it mandatory to incorporate 1% of biofuels in kerosene. Out of the approximately 7 to 9 million cubic meters of kerosene consumed each year, sustainable aviation fuels of non-fossil origin will have to represent 2% to 3% in 2025 and 5% to 6% as of 2030.

As airlines struggle to source sustainable aviation fuels (SAF) to reduce their CO2 emissions, intercropping is an answer to both a regulatory and environmental need. Due to their rapid 90-day growth cycle, these species help preserve soils by absorbing excess nitrogen while maintaining biodiversity. An example of an intercrop species is carinata, developed by the seed company Nuseed, enabling the intercrop period between the harvest of a main crop and the sowing of the next crop to be optimized to harvest a sustainable, low-carbon raw material that can be used to produce sustainable biofuels.

In 2022, Nuseed and BP signed a strategic agreement to expedite the uptake of Nuseed Carinata by the aviation biofuels market. As an expert in oilseed crushing and sustainable seed provisioning for low carbon oil and energy production, Saipol will be instrumental in its transformation for the biofuels industry.

Saipol decided to launch an investment program to modernize the site located in Sète. This is set to become the world's largest industrial unit capable of processing both Nuseed Carinata and rapeseed.



BIOTJET CONTRIBUTES TO THE DECARBONIZATION OF AVIATION

Headed by Elyse Energy, the BioTJet project is designed to build and operate the largest French industrial facility for producing advanced biokerosene made from sustainable biomass. The BioTJet project draws on the BioTfueL® technology developed by Avril and its partners over more than ten years. The project will enable the use of a wide range of lignocellulosic biomasses, mainly from local forestry and end-of-life wood waste.

This resource does not compete with food production. It is essentially based on a process combining torrefaction, gasification, and Fischer-Tropsch synthesis. In 2022, the agreement to set up the BioTJet project company was signed with Elyse Energy, Avril, Axens, Bionext, and IFPI, IFP Energies nouvelles' investment subsidiary, as shareholders. Looking ahead to 2027, the BioTJet project seeks to produce 110,000 tons/ year of sustainable aviation fuel and renewable naphtha for the airline and industrial sectors.

Vegetable-based chemistry at the forefront of sustainable innovation

Manufacturers and consumers are in search of more responsible products, both for their health and for the environment. The innovations developed by Avril's entities enable meeting these growing societal expectations. With this in mind, Oleon is breaking new ground by developing innovative processes combining enzymatic chemistry and membrane filtration. An INCITE industrial demonstrator was built by Oleon as part of the ZENITH project, co-financed by the European Commission.

What is at stake? Producing higher quality oleochemical esters for the health and beauty industry using a process that reduces energy consumption and greenhouse gas emissions.

JOLEE, OLEON'S PREMIER SUSTAINABLE COSMETICS BRAND

The Jolee brand, developed by Oleon, is tailored to meet the objectives defined by the EcoBeautyScore consortium, the result of a collaboration since September 2021 of leading players such as L'Oréal, Henkel, LVMH, Unilever, and Natura & Co. The objective: create a standard method of evaluation over the entire life cycle of products, using a uniform scientific rating system enabling consumers to inform themselves about the environmental impact of their products.

Jolee employs alternatives having the best possible environmental record, throughout the production process, from raw material to packaging. In addition, thanks to "Ecolibra," Oleon's sustainability rating tool developed by its CSR team, the company is now in a position to make decisions about its entire future innovation process to ensure 100% new products with a sustainability advantage.

100% eco-responsible children's bed launched by Evertree and CAMIF



EVERTREE, AN ALTERNATIVE TO SOURCED RESINS

Evertree, a young innovative French business unit of Avril, develops, produces, and markets high-performance adhesive solutions derived from rapeseed and sunflower. Using resins derived from renewable and local resources, Evertree is able to offer a natural alternative to products derived from the petrochemical industry. In June 2022, Evertree received the eco-design award at the Trophées Industrie Durable of French trade media l'Usine Nouvelle. This year, the company developed several significant collaborations with companies committed to a responsible furniture industry.

For example, Evetree together with CAMIF introduced the first 100% eco-responsible children's bed using a formaldehyde-free biosourced panel from Next solution, manufactured by Panneaux de Corrèze. Using the same technology, Evertree partnered with CEDEO to design a line of bathroom furniture featuring a 20% smaller carbon footprint, thereby contributing to significantly improved air quality.





innovative projects funded per year on average

30

projects in progress

INVESTING IN THE FUTURE OF THE SECTOR

60%

Sofiprotéol, an innovation facilitator for the competitiveness of the agricultural and food industry sectors

of projects dedicated to the agro-ecological transition

Through Sofiprotéol's financial activities, Avril is preparing the future of the sector in the general interest of its stakeholders. The French Oilseed Strategic Action Fund (FASO) is managed by Sofiprotéol on behalf of Terres Univia.

Its objective is to finance innovative research projects and collective infrastructures designed to improve the competitiveness and sustainability of production and to develop outlets for the oil and protein sector.

The French Oilseed Strategic Action Fund's (FASO) 2022-2024 business plan focuses on four innovation themes addressing both the major challenges of the industry and those of society:

- Protein sovereignty
- The agro-ecological transition
- The food transition
- The energy transition

In terms of protein sovereignty, these projects focus in particular on developing varieties of rapeseed, sunflower, pea, soya, and flax. These varieties are adapted to the needs of a more protein-rich animal feed, to the fertilization of rapeseed in order to modulate its protein content and quality, and to the improvement of the protein autonomy of farms. Prospective studies and field demonstrators enable identifying the contribution of French oilseeds in improving protein autonomy in livestock.

In terms of the agro-ecological transition, priority is given to developing varieties of rapeseed, sunflower, and legumes that are more resistant to diseases and pests, enabling reduced use of chemical inputs and improved crop competitiveness. Developing innovative biocontrol approaches to fight rapeseed insects is also a major priority.

The contribution of biostimulation and innovative digital tools to meet climatic challenges also continues to be a major area of support.

In light of the world's growing population and new consumer trends in favor of a more plant-based diet, the FASO supports innovative projects aimed at accompanying the food transition. The FASO conducts prospective studies and trend analyses enabling the sector's players to identify market expectations and the value potential of oils and proteins.

In addition, projects focused on the energy transition include biofuels through the support for the approval of vehicles running on B100, a 100% renewable biofuel produced from rapeseed, or the construction of a second-generation biofuel demonstrator.

€124 M

AMOUNT INVESTED BY CAPAGRO INTO FRENCH AND EUROPEAN START-UPS OVER THE PERIOD 2014-2022

CAPAGRO: SUPPORTING FRENCH AND EUROPEAN AGRI-FOOD TECH START-UPS

Capagro is a venture capital investment fund launched by Avril along with other key players in the agri-food sector in 2014. It specializes in investing in and advancing European AgriTech and FoodTech start-ups.

Between 2014 and 2022, the fund invested €124 million in French and European start-ups in various sectors. Notably: Naio Technologies, Ecorobotix, and BoMill in robotics and equipment, Agrieconomie in agricultural e-procurement, Cellucomp in bio-based material, Yooji and Nick's in personalized nutrition, Japhy, La Belle Vie, and Colvin in e-commerce, CleanGreens in indoor farming, and eProvenance in food traceability.

In September 2022, Capagro announced the launch of a second fund worth €200 million, with an initial investment in Cuure, a European player in the personalized health sector. The new fund's objectives will focus on innovative projects for sustainable agriculture and healthy food.





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