

2023

Sustainability Report

Empowering Impact: Driving Sustainable Progress with Purpose



Essential inputs. Extraordinary outcomes.[∞]

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About the 2023 Report

This is the third sustainability report published by Advancion Corporation ("Advancion" or "Company"), formerly ANGUS Chemical Company. Our commitment to annually disclosing our sustainability strategy, practices, and performance underscores our dedication to public transparency and accountability. Through transparent reporting we enable a better understanding of the Company's environmental impact, resource management, and commitment to purposeful, sustainable progress. We believe this fosters trust among all our stakeholders, including investors, customers, employees, and relevant regulatory bodies.

Reporting period	The data and disclosures in this report cover operations and activities for the fiscal and calendar year beginning January 1, 2023, and ending December 31, 2023, unless otherwise stated. This report also contains information on other key sustainability activities occurring in the first half of 2024.
Reporting scope	Facilities owned and directly operated by Advancion and its affiliates during 2023, including select data related to Expression Systems, LLC, which was acquired by Advancion in November 2022.
Reporting framework	Reporting Standards 2021 (GRI Standards), as well as other standards issued by the Sustainability Accounting Standards Board (SASB) and the United Nations Sustainable Development Goals (UN SDGs). In some cases, numbers and percentages in the report may reflect estimates or approximations and may rely on assumptions. This report also contains statements regarding targets, plans, strategies and objectives that are "forward-looking" and aspirational in nature.
Restatements	There are no restatements and no changes from previous reports in terms of scope and / or boundaries included.
External assurance	Data included in our 2023 Sustainability Report was aggregated, analyzed and reviewed by Advancion's Environmental, Health and Safety (EH&S) Department; Senior Leadership Team; Board of Directors; and other key internal stakeholders. While our data undergoes a robust internal quality control process, it has not undergone a third-party validation and / or assurance process in its entirety. We are evaluating obtaining external assurance for our data collection and sustainability reporting process in the future.



Feedback and questions about the report

For copies of our publicly available policies, or for more information regarding our operations, please visit advancionsciences.com. A downloadable version of this Sustainability Report and GRI Index is available on our website at advancionsciences.com/sustainability.

For questions, comments and suggestions about our report, please contact:

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In 2024, Advancion achieved EcoVadis Gold Recognition Level in sustainability performance for the fourth consecutive year and sixth year overall since we first began participating in the independent assessment program in 2017. EcoVadis is an evidence-based platform adapted to more than 200 industry categories, 160 countries and companies of all sizes.

Advancion's overall 2024 score of 75/100 represents a 2-point increase from the prior year and is based on continuous improvements made by the Company in the four areas of corporate social responsibility (CSR) and sustainability assessed by EcoVadis: Environment.

Labor Practices and Human Rights, Fair Business Practices, and Sustainable Procurement. EcoVadis Gold rating places Advancion in the top 5% of global companies assessed by EcoVadis.



A statement from our CEO



To our stakeholders,

I am proud to present our 2023 Sustainability Report detailing our commitment to responsible growth and sustainable business practices. This is our third annual public report, which has been prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021, ensuring transparency, accountability, and a comprehensive view of our sustainability strategy and progress.

As a global producer of specialty ingredients and consumables for the world's most essential industries, we understand the critical role we play in shaping a more sustainable

future. The theme of this year's report, "Empowering Impact: Driving Sustainable Progress with Purpose," focuses on the positive contributions our ingredients and our people are making to improve the environment, society, and the economy.

In the past year, we made substantial progress further integrating sustainability into our core business strategy with the launch of two new products developed from bio-based raw materials. These innovations reflect our dedication to creating high-performance ingredients that meet market needs while reducing our customers' carbon footprint. The development and introduction of new bio-based products represent a pivotal step in our journey towards a greener, more sustainable product portfolio.

Our research, development and application teams are at the forefront of this transformation, working tirelessly not only to develop new materials that are both sustainable and superior in quality and functionality, but also developing new applications that contribute to a circular economy, where materials are used more efficiently, waste is minimized, and end products have an improved environmental profile. From high-purity excipients and high-performance cell culture media used to develop and produce advanced therapies to specialty additives for low-emission waterborne coatings and high-efficiency industrial carbon capture applications, Advancion's expanding portfolio of high-performance, multifunctional ingredients are an integral part of broader solutions that are advancing our world.

Reducing our environmental impact remains a top priority. In 2023, we reduced waste intensity and overall waste generated, as well as reduced total energy consumption across our facilities. We also finished the year with zero injuries at our major manufacturing facilities in Louisiana and Germany, corporate headquarters, and regional Customer Application Centers. Beyond our own operations, we are actively engaged in community development projects, supporting education, healthcare, and environmental conservation initiatives.

While we are proud of our progress, we recognize there is still much work to be done. The challenges of climate change, resource scarcity, and social inequality require us to continually innovate and adapt. In the coming year, we will focus on enhancing our sustainability reporting, setting more ambitious and relevant targets, and deepening our engagement with stakeholders. We are proud of our commitment to and our progress as a leader in safe and sustainable practices within the specialty chemical industry and beyond.

I would like to thank our employees, customers, partners, and shareholders for their continued support and collaboration. Together, we can create a more sustainable future for all.

David Neuberger President and Chief Executive Officer

About Advancion

Advancion is a portfolio company of Ardian and Golden Gate Capital and a leading global producer of specialty ingredients and consumables for biotechnology, pharmaceutical, consumer and industrial applications. Our unique ingredients help improve product performance, quality, consistency, durability, stability and other important attributes in end-use formulations. Through Expression Systems, an Advancion company, we produce innovative cell culture media formulations, cell lines, molecular tools and reagents used in the development and commercial manufacturing of advanced therapies. Many Advancion products have a favorable environmental profile that enable our customers to meet or exceed increasingly stringent environmental regulations and performance requirements.

Our purpose

We look beyond conventions to design and develop solutions that enrich lives and enable our customers to advance the world.

How we see the world

Purposeful thinkers

We fuse intelligence with intentionality. We have a deep understanding of customer needs and recognize exactly what it takes to meet them.

Passionate inventors

Where others see a plateau, we see a platform. We have a powerful passion for potential and are constantly seeking new ways to unlock it.

How we work

Proactive

We operate with equal parts agility and accuracy. We ensure that we complete our work quickly and that we do it correctly the first time.

Collaborative

We're bound by a shared vision for progress. We each play an essential role in making this vision a reality.

Our values

Our values represent how we think and act — the behaviors that define our people and culture.

Applied ingenuity

We are creators by nature, always reimagining new ways to apply our ingredients.

Thoughtful originality

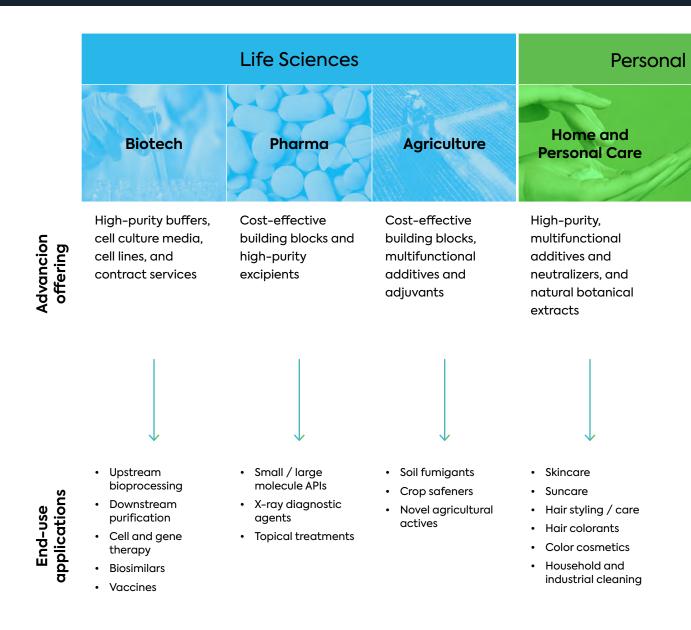
We're energized by our ability to see beyond conventions.

Principled and pragmatic

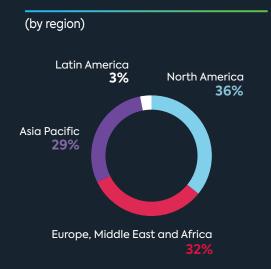
We stand strong behind our principles.

Essential inputs. Extraordinary outcomes.™

We combine precision and ingenuity to reimagine, rebuild and tailor ingredients that transform the world's most essential industries.



2023 sales revenue



2023 sales revenue

(by market)

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27% Personal Care and Consumer



33% Performance Ingredients



Care and Consumer		Performance Ingredients		
Electronics	Residential Paints and Coatings	Industrial Paints and Coatings	Metalworking Fluids	Other
High-purity, low-metal multifunctional dispersants, stripping agents, and process additives	High-performance, multifunctional additives, co- dispersants and pollution scavengers	Specialty, multifunctional additives, synthesis intermediates, crosslinkers, solvents, process aids	High-performance additives and neutralizers, and specialty emulsifiers	High-performance intermediates, process aids, specialty solvents, multifunctional stabilizers and functional additives
 Lithium-ion batteries Flat panel displays Semiconductors Integrated / printed circuit boards 	 Low- / no-VOC waterborne architectural paint Green label paints Activated carbon air filters 	 Low- / no-VOC waterborne pigment slurries Direct-to-metal coatings Automotive paints Aerospace coatings Industrial solvents 	 Extended life semi-synthetic / synthetic metal removal fluids Metal cleaning fluids Wire drawing fluids Multi-metal fluids 	 Synthetic rubber Pulp and paper Water treatment Chemical manufacturing and synthesis Upstream oil and gas

Where we operate



Essential inputs. Extraordinary outcomes.[™]





A fully integrated nitroparaffin basics, nitroalkane derivatives and crystallization manufacturing site



Key investments in capacity expansions further enhance dual-sourcing capabilities for majority of Advancion product families



Expression Systems' Davis facility is FDA Registered as a Medical Device Manufacturer #3005875593, adheres to 21 CFR Part 820, and has an ESF AF DMF on file with FDA CBER

Site history:

1923 Initial operation as carbon black production facility (Thermatomics)

1955 Commercial Solvents Corporation (CSC) relocates nitropariffin manufacturing to Sterlington; start-up of first commercial batch-manufacturing plant for TRIS AMINO[™] and precursor raw materials

- 1996 New pilot plant commissioned to serve both R&D and developmental production scale
- **1997** Start-up of dedicated cGMP TRIS AMINO[™] Ultra Pure batch manufacturing facility
- 2016 Expanded cGMP production capacity for high-purity TRIS AMINO™ Ultra Pure
- 2019 Opened new Life Sciences warehouse, QC laboratory, and filling / packaging center
- 2022 Capacity expansion for commercial production of TRIS AMINO[™] Hydrochloride (HCI) and HEPES buffers

Size:

386 total acres (includes 110 acres of greenbelt land)

Number of employees:

~170 full-time employees

Products produced:

Nitroparaffin basics (2NP, 1NP, NE, NM), nitroalkane derivatives (nitro alcohols, amino alcohols, oxazolines, oxazolidines and hydroxylamines), life sciences buffers (TRIS AMINO[™], TRIS AMINO[™] HCI, HEPES, HEPES sodium salt and MOPS)

Site history:

- **1974** Company expands to Europe with opening of a new production facility for manufacturing amino alcohols and other nitroparaffin derivatives
- 2017 Opened new state-of-the-art pharmaceutical intermediate manufacturing facility
- 2019 Start-up of new TRIS AMINO™ AC Advanced Crystal continuous manufacturing capacity
- 2023 Completed installation of 5 GWh/year solar power plant; achieved 24 years without a recordable injury or illness (according to German legislation)

Size:

50 total acres

Number of employees:

~70 full-time employees

Products produced:

Nitroparaffin derivatives and crystallization, AMP-ULTRA[™] PC, AMP[™], CORRGUARD[™] EXT, CORRGUARD[™] FLEX, TRIS AMINO[™] Advanced Crystals, AEPD[™] VOX 1000, Serinol, DMAMP-80[™], DMAMP Regular, DL-2AB, DL-2AP

Site history:

- 1997 Initial operation
- 2022 Acquired by Advancion in November
- 2023 Expanded manufacturing capacity and capabilities to support commercial launch of new, proprietary AdvanCD™ chemically defined insect cell culture media

Size:

30,000 sq ft R&D and production facility

Number of employees:

~40 full-time employees

Products produced:

ESF AdvanCD[™], ESF 921, ESF AF and ESF SFM insect cell culture media; Sf9 RV-Free, Sf9, TniPRO, Sf21, Tni and S2 master working and research cell banks; molecular tools that support the BEVS platform; and specialized production reagents

Essential inputs. Extraordinary outcomes.™

Driving sustainable progress with purpose

EMPOWERING IMPACT:

Today, the world is grappling with increasingly complex and interconnected issues related to climate change, global food security, natural resource depletion, and evolving public health challenges. At Advancion, we view these challenges as new opportunities to leverage our expertise and innovative ingredients to empower impact by creating positive, transformative change across the various end markets in which we participate, as well as society at large.

Our ability to drive sustainable progress with purpose encompasses utilizing technological advancements and specialized knowledge to enable and enhance the performance, efficiency, and sustainability of end products and industries critical to modern life, such as agriculture, healthcare, energy, and manufacturing.

In healthcare, Advancion's high-purity building blocks, reagents, and insect cell culture manufacturing platforms are essential to the discovery, development and commercial production of life-saving drugs and advanced therapies that improve global health outcomes. In agriculture, our ingredients are used as key inputs for next-generation crop protection products that are helping increase food production and ensure food security, while minimizing environmental impacts. Our unique chemistries are helping accelerate the transition to renewable energy technologies with unique functionalities that can improve the power density and discharge rate of lithium-ion batteries, as well as enable the development and commercial production of recyclable epoxy wind turbine blades. When used in industrial manufacturing processes, from metalworking fluids and industrial coatings to water treatment and leather processing, our high-performance additives and ingredients enable critical industries to reduce waste, lower emissions, and increase recyclability.

Empowering impact also involves our commitment to developing products and processes that not only meet the immediate needs of our customers, but also contribute to broader societal goals, such as environmental protection and resource conservation. This includes high-efficiency ingredients that reduce pollution and waste, and innovating in ways that foster a circular economy by introducing new products using renewable raw materials.

The concept of empowering impact reflects our holistic approach where Advancion acts as a catalyst for positive change, driving progress that is measurable, sustainable, and beneficial for all stakeholders involved.

2023 quick facts

54% total revenues generated in 2023 by products that have a positive impact on health, reduce waste, or have a better overall environmental profile (compared to 53% in 2022).

Criteria	% total 2023 revenue	% total 2022 revenue	Market segments
Positive impact on health	~40%	~39%	Biotech Pharmaceuticals Personal Care Agriculture
Improves end product profile	~10%	~11%	Personal Care Paints & Coatings Electronics
Waste minimizing	~4%	~3%	Metalworking Paints & Coatings

SPOTLIGHT ON IMPACT Vehicle electrification

Vehicle electrification is essential to creating a sustainable and resilient global transportation system, which benefits the environment, economy, public health, and energy security. In addition to producing zero tailpipe emissions, electric motors are more efficient than internal combustion engines, converting a higher percentage of energy from the battery into vehicle movement.



Lithium-ion batteries (LiB) are the most critical component in electric vehicles (EVs). The quality of the cathode slurry coating used in the production of battery cells, specifically the dispersion of conductive carbon materials used in the slurry, plays a vital role in the overall LiB performance.

VOLTAN[™] 200 is an anhydrous, multifunctional specialty additive specifically designed by Advancion to improve dispersion of active, conductive materials used in LiB production. It enables the formulation of more stable slurries with a reduced viscosity while optimizing the particle packing of active materials. This, in turn, enhances the conductive network and density of the finished electrode film.

As a result, manufacturers can achieve improved processing at higher active material loading levels at the same processing viscosity. In addition, cathode slurry coatings produced using VOLTAN 200 show reduced cracking helping to improve the overall electrochemical performance of the LiB. Unlike polymeric dispersants which add dead weight and reduce the electronic conductivity of electrode films, VOLTAN 200 can evaporate during electrode film drying processes. Vehicle electrification and the growing need for energy have also significantly increased the demand for copper and aluminum wire, as well as the high-performance lubricants used during the wire manufacturing process. Aluminum wire drawing is a difficult operation requiring semi-synthetic fluid formulations that provide excellent multi-metal compatibility, lubricity, and fluid life.

Our CORRGUARD[™] EXT multifunctional amino alcohol provides excellent neutralization, lubricity, stain resistance, multi-metal compatibility, and extended life in demanding wire drawing fluids formulations. When used in conjunction with other specialty formulating ingredients, CORRGUARD EXT helps improve wire drawing fluid performance and longevity, in turn reducing waste and enabling formulators to develop high-performing wire drawing fluids with an improved sustainability profile. Advancion is a leading global manufacturer of a unique portfolio of specialty ingredients that enable formulators to create paints and coatings that help improve indoor air quality.

Our multifunctional additives, such as AEPD[™] VOX 1000 and AMP-95[™], provide high-efficiency neutralization, pigment dispersion and enhanced formulation stability in low- and zero-VOC waterborne formulations. These ingredients not only set the benchmark for performance, but also have low or no emissions, which can enable coatings formulations to comply with various regulatory and green label requirements around the world.

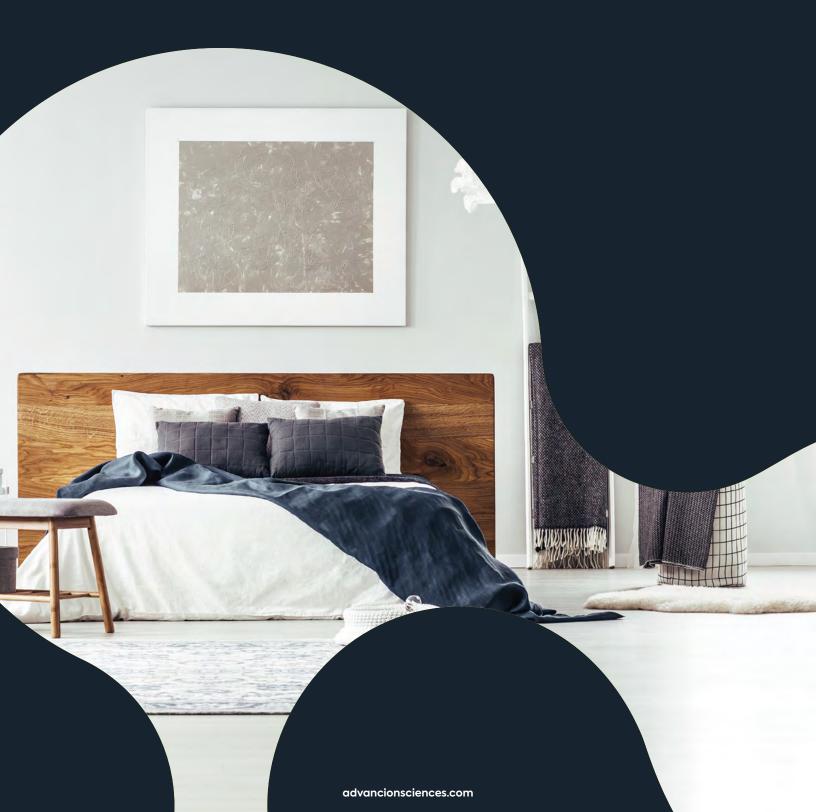
Advances in air purification and ventilation technologies have made it easier and more cost-

effective to monitor and improve indoor air quality. One of the most common indoor air pollutants is formaldehyde emitted from carpets, furniture, electronics, household cleaners and other synthetic materials, which can pose a significant short- and long-term risk to human health.

Our TRIS AMINO[™] Crystals amino alcohol is proven to provide high-efficiency formaldehyde scavenging performance when used in impregnated activated carbon air filtration systems. This unique multifunctional additive can also be used at low dosage levels to add formaldehyde scavenging performance to existing waterborne architectural paint and construction applications, helping improve indoor air quality without requiring major reformulation work.

Poor indoor air quality has been linked to a variety of health issues, including respiratory diseases, cardiovascular problems, and even cognitive impairments. With greater public awareness of these health impacts, governments and health organizations are increasingly implementing regulations and guidelines to ensure safe indoor air quality.

SPOTLIGHT ON IMPACT Indoor air quality improvement



SPOTLIGHT ON IMPACT Advanced therapy development



An Advancion Company



In early 2024, Expression Systems, an Advancion company, introduced a new, scalable baculovirus expression vector system (BEVS) manufacturing platform designed to enhance productivity and streamline regulatory processes for progressing advanced therapies through clinical trials and into commercialization.

This proprietary platform is comprised of a Sf9 rhabdovirus-free insect cell line codeveloped with ESF AdvanCD[™] chemically defined insect cell culture medium. When coupled together, the new platform demonstrates exemplary cell growth and impressive expression yields – up to 5 times more – than other platforms.

While regarded as safe, insect cells can contain endogenous viruses such as Sf-rhabdovirus, that are considered process contaminants which must be removed during the manufacturing process. Starting research and development efforts with a rhabdovirusfree Sf9 cell line eliminates the need for complex post removal and reduces viral clearance assays. Expression Systems' Sf9 RV-Free cell line was developed from the deposition of a single cell into a cloning plate offering proof of monoclonality and streamlined FDA approval. The Expression Systems' BEVS platform can help researchers and commercial biopharmaceutical manufacturers produce large quantities of proteins, with better consistency and robustness, leading to quicker, more predictable production cycles and less waste, and reduced energy consumption. In addition, BEVS can be used to quickly produce vaccines, essential during pandemics or outbreaks, and was notably used in producing certain influenza and COVID-19 vaccines.

BEVS is a robust and versatile platform for producing AAV (adeno-associated virus) vectors, VLPs (virus-like particles), and recombinant proteins used in manufacturing vaccines, gene therapies and diagnostic tools. It leverages the baculovirus' ability to infect insect cells, leading to high-level expression of target proteins.



In our pursuit of more sustainable solutions, Advancion is increasingly focused on the development of innovative products and processes that not only reduce environmental impacts but also achieve more efficient and responsible use of natural resources.

In April 2024, we introduced a new, 50-percent biobased multifunctional amino alcohol specifically for use in beauty and personal care applications. This innovative ingredient is the result of several years of development focused on providing formulators and manufacturers with a powerful tool to create highperformance formulations that meet the growing demand for natural and eco-friendly cosmetics and personal care products.

Unlike many natural alternatives that compromise on performance, our new amino alcohol not only has a Natural Origin Index (NOI, ISO 16.128) of 0.65, but it also offers several key performance benefits, such as high-efficiency neutralization, emulsion stabilization and pigment dispersion, setting it apart from other ingredients available in the market. For manufacturers seeking to leverage the high-performance advantages of amino alcohols while prioritizing natural origin and sustainability, our bio-based amino alcohol represents a significant breakthrough. In May 2024, we launched the latest addition to our CORRGUARD[™] family of high-performance additives for metalworking fluids, CORRGUARD[™] SA-100, a multifunctional alkanolamide emulsifier manufactured using 55% renewable raw materials. CORRGUARD SA-100 provides outstanding emulsification in semisynthetic and soluble oil metalworking fluids and features low foaming, excellent hard water stability, lubricity and outstanding corrosion and staining protection for both ferrous metals and aluminum alloys.

Our latest innovations underscore Advancion's commitment to sustainability and align with industry trends towards increasing use of natural ingredients and eco-friendly formulations. By offering high-performing additives with a substantial renewable content, Advancion is helping address market demands for products that combine efficacy with environmental responsibility.

SPOTLIGHT ON IMPACT Sustainable design

SPOTLIGHT ON IMPACT Supply chain sustainability and security





Our fully integrated manufacturing operations and global supply chain are crucial to our ability to produce high-quality, high-performance ingredients safely and reliably. We source over 100 different raw materials from multiple long-term suppliers, safeguarding against potential supply disruptions and significant price increases. Our significant investments in dual-source manufacturing capabilities for all major product lines further ensure supply chain continuity and security for our customers.

We build and maintain every relationship across the global value chain on a foundation of responsibility, accountability, and integrity. This is embodied in the Advancion Supplier Code of Conduct, which outlines our expectations for suppliers regarding environmental stewardship, health and safety, labor relations, human rights, and ethical business practices. This Code of Conduct is applicable to all Advancion suppliers.

2023 quick facts

Our global supply chain

- >500 suppliers
- >3,500 customers
- >25 authorized regional distributers
- >120 countries where our products are sold

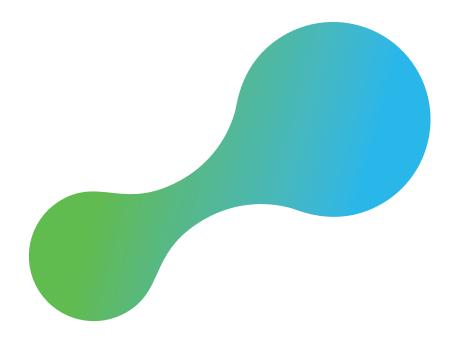
Key spend categories

- Raw materials
- Packaging
- Transportation and logistics
- Capital equipment
- Maintenance services
- Process chemicals and catalysts
- Spare parts and equipment
- Energy and utilities
- Professional services
- Information technology
- Travel
- · Engineering and environmental services

Transformational investments in 2023

In 2023, we made significant progress with several strategic initiatives.

- → On September 1, 2023, we completed our corporate rebrand and corporate name change to Advancion Corporation. Our new name emphasizes our transformation into one of the world's largest suppliers of life sciences buffers and other proprietary ingredients, providing high-performance products, best-in-class quality and guaranteed supply security across various industries and applications.
- We also made significant progress with the integration of our Expression Systems business from both a commercial and operational standpoint. As part of the integration, we launched a new chemically defined insect cell culture media, ESF AdvanCD™. ESF AdvanCD media is suitable for research use or commercial manufacturing and offers exceptional performance while improving the consistency and efficiency of gene therapy and other biologics manufacturing processes.
- Other new product introductions in 2023 include the start-up of in-house commercial production of HEPES sodium salt, a biological buffer widely used in bioprocessing, diagnostics, and molecular biology applications.
- → In November, the Company introduced a new-to-market molecule that provides automotive and industrial coatings and ink formulators with novel functionality and utility as a multifunctional neutralizer, catalyst and additive. This new product was developed to help support the transition from solventborne to waterborne industrial coatings technologies, while reducing energy consumption during the critical application and curing process.

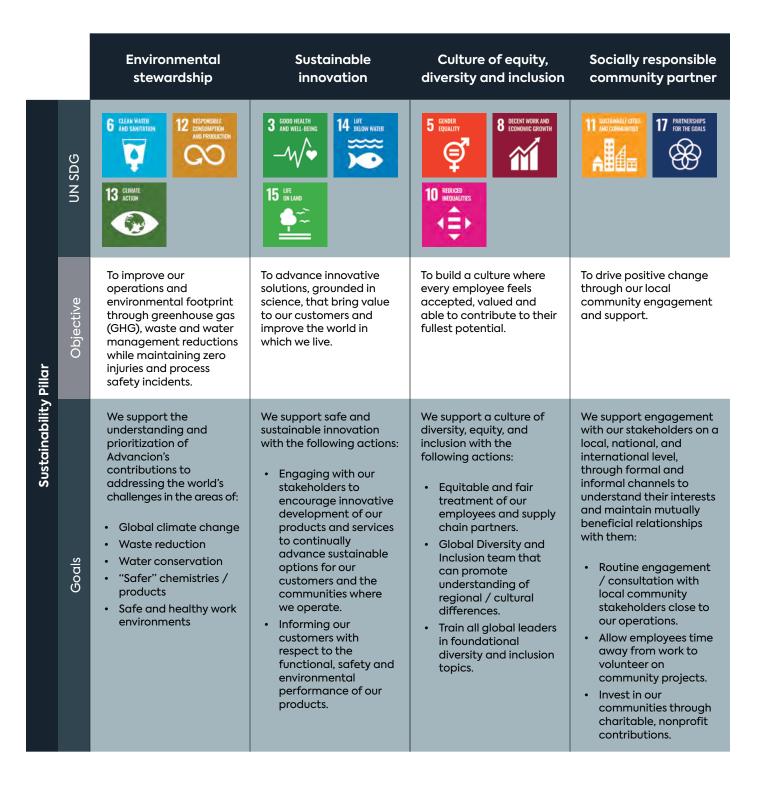


Advancion

The Advancion Sustainability Blueprint

Our sustainability blueprint

Advancion's Sustainability Blueprint was first introduced in 2021 and consists of four distinct sustainability pillars aligned to the United Nations Sustainable Development Goals (UN SDG). The objectives and goals outlined in each pillar guide the development, review, tracking and impact of our products, operations and supply chain. Performance against our sustainability targets is reported annually in our public Sustainability Report.





Sustainability at the core of our business strategy and operations

The essential elements of sustainability are central to our global business strategy and provide a platform for taking a purposeful and measurable approach to securing Advancion's long-term success, reducing risk, enhancing our brand reputation, and driving innovation and competitiveness in an evolving business landscape. As an organization, we are committed to continuously improving our sustainability performance throughout all our business operations as well as supporting our customers' sustainability initiatives through the products and services we provide. We achieve this through implementation of the Advancion Sustainability Blueprint and by embedding the core tenets of sustainability across all operational areas and at all levels of our organization.

SPOTLIGHT ON IMPACT Environmental preservation and protection

In 2023, we worked toward our ambitious 2030 goals aimed at reducing water, waste, energy, and GHG intensity. These targets are based on our 2020 environmental metrics highlighted in the table below. Our intensity-based environmental objectives are primarily centered around Advancion's three manufacturing facilities in the U.S. and Germany, as well as our global headquarters and Research, Development and Applications (RD&A) Center in Buffalo Grove, Illinois. Our Target 2030 Goals highlight the significance of our environmental initiatives in contributing to customer sustainability objectives as well as enhancing the sustainability of our current operations and product range.

2030 targets – emissions, energy, waste and water	Initial KPI target	2020 baseline	Example pathways to reductions
GHG intensity (Scope 1-2)	10% reduction	1.25 (MTCO ₂ e/MT)	 Improved product yields and operational efficiencies Investigate purchasing carbon offsets Expand internal methanol and isopropyl alcohol recycling capability
Energy intensity	10% reduction	5,100 (kWh/MT of production) 1.3 % (% of renewable energy)	 Installation of solar energy panels in Sterlington and Ibbenbüren Increase purchase of renewable energy
Waste intensity	10% reduction	0.207 (MT/MT of production)	 Increase recyclable waste Reduce waste through process optimization and material recovery Expand site waste minimization plans Increase beneficial reuse for excess products Install SCRs on boilers
Water intensity	10% reduction	0.006 (megaliter/MT)	 Reduce once through cooling water Recycle condensate Investigate reuse of effluent water Minimize flowing water for freeze protection

Governance

Our Global Sustainability Team is responsible for the development and implementation of Advancion's Sustainability Blueprint, which has senior executive and Board-level oversight. Progress and new developments are regularly reviewed with senior management and the Board, and the Sustainability Blueprint is evaluated and updated on an annual basis. In addition, Advancion undergoes a third-party assessment of its progress against sustainability initiatives and programs. Updates related to our sustainability initiatives can be found in our annual Sustainability Report as well as on advancionsciences.com. Our day-to-day operations in 2023 were managed by an 11-member Senior Leadership Team. Both the Board of Directors and the Senior Leadership Team actively engage on a regular basis to review the Company's safety performance and associated risks, as well as oversee various responsibilities in areas such as sustainability, environmental, health and safety matters, diversity and inclusion, and climaterelated issues.

Our eight-member Board of Directors includes two independent directors with long-term experience in the Life Sciences market, our Chief Executive Officer, and five Directors representing our two ownership groups who bring deep and varied experience in a variety of relevant operational capacities. As in prior years, sustainability was given significant focus at the Board level in 2023.

The Advancion Sustainability Team plays a crucial role in the organization and is comprised of members from the Senior Leadership Team and functional group leaders. This team is under the leadership of the Senior Vice President of Regulatory, Product Stewardship, Quality, and Sustainability, a role with executive oversight over all Sustainability programs at Advancion reporting directly to the CEO.

Our sustainable success is enabled by our people, who are at the heart of our competitive advantage. We operate with a high-performance culture based on a commitment to continuous improvement driven by the functional expertise, experience, collaboration and passion of our people. Company functions are responsible for developing and managing the processes relevant to the implementation of action plans related to the Advancion Sustainability Blueprint.

Internal

Board of Directors

- Exercises oversight of the Company's strategic plans, programs and initiatives with the view of short- and long-term development of Advancion for the benefit of all stakeholders
- Reviews the effectiveness of and approves material sustainability investments and initiatives

Senior Leadership Team

- Sets the Company strategy, including climate and other sustainability targets
- Reports on material sustainability issues to the Board of Directors on a regular and ad-hoc basis
- Oversees activities related to the implementation of the Company's sustainability strategy and progress

Global Sustainability Team

- Strategic development, planning, and oversight of sustainability issues and initiatives across the Company
- Responsible for driving companywide engagement with our sustainability programs and targets and provides guidance and support to sites, regions and markets to develop action plans to achieve our goals
- Collects and monitors data on the Company's sustainability performance and prepares related public disclosures

Company Functional Areas Responsible for Sustainability Focus

Communications and Investor Relations	Strategic Procurement
Regulatory, Product Stewardship and Quality	Human Resources
Environmental, Health and Safety	Finance, Tax and Accounting
Research, Development and Applications	Global Supply Chain Planning and Logistics
Manufacturing and Operations	Marketing, Sales and Customer Service

External

Sustainability Advisors

Provides independent assessments of our sustainability initiatives and progress

Stakeholders

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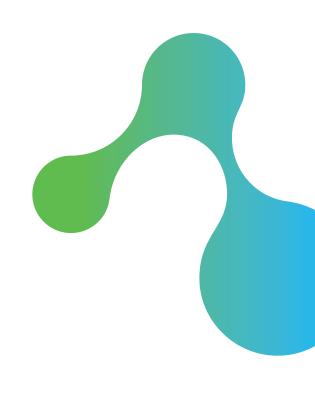
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Provides insights into and feedback on the benefits and potential impact of our operations, products, and services around the world





Materiality

In 2021, we completed a comprehensive materiality analysis in conjunction with the development of the Company's first Sustainability Report. This, together with the updated reporting guidelines established by the GRI Universal Standards 2021, as well as other external resources, such as the Sustainability Accounting Standards Board's (SASB) materiality matrix for the chemical industry, provide the framework for identifying the GRI topics material to Advancion and our stakeholders included in our 2023 Sustainability Report. In addition, we report out on several topics included in the GRI Standards determined to be not material or relevant to Advancion, but where data was readily available.

The following topic-specific standards were identified as material to Advancion's internal operations and may also impact stakeholders outside the company on a global scale, such as upstream and downstream entities across our value and supply chain. Of the topics that are deemed materially relevant, their relative importance was evaluated against two criteria: importance to stakeholders and the importance to Advancion (in terms of the significance of the economic, environmental, and social impacts). We also took a subjective view of Advancion's ability to impact each topic. The most relevant entities outside of Advancion on which the material aspects of this report may have an impact include:

- · Customers who purchase Advancion products.
- End-user customers and consumers who purchase products from our customers that utilize Advancion products.
- Raw material producers and other suppliers from whom Advancion procures products and / or services.
- Local communities in which Advancion operates.
- Owners and investors.

2023 material topic disclosures

Material topic disclosure	GRI standard
Anti-competitive behavior	206
Anti-corruption	205
Customer health and safety	416
Customer privacy	418
Diversity and equal opportunity	405
Emissions	305
Employment	401
Energy	302
Environmental compliance	307
Freedom of association and collective bargaining	407
Local communities	413
Marketing and labeling	417
Non-discrimination	406
Occupational health and safety	403
Socioeconomic compliance	419
Training and education	404
Waste	306
Water and effluents	303

Stakeholder engagement

We are committed to developing and sustaining strong, mutually beneficial relationships with a wide range of internal and external stakeholders worldwide, including customers, investors, employees, consumers, and communities in which we operate. We actively engage with our stakeholders at local, national, and international levels through both formal and informal channels. This helps us understand and address their interests effectively. The valuable feedback we receive from these engagements enables us to continually enhance our sustainability efforts.

2023 quick facts

Stakeholders

A variety of stakeholder groups around the world maintain a relevant interest in our long-term sustainability, including, but not limited to:

412

88

3,500+ customers

full-time employees

500+

contractors

suppliers

- Numerous local communities in which we operate
- Members of chemical industry trade unions around the world
- Our investors and the broader investment community
- Relevant government and regulatory agencies

Local communities, trade associations and NGOs

How we engage

- Community advisory groups; state, local and national business associations
- Numerous activities centered on matters of public safety, charitable giving, health and human services, STEM education, and more
- Membership in global and regional industry, trade, and professional associations
- Local, national, and multinational initiatives sponsored by non-profit / scientific advocacy groups focused on sustainable business practices, innovation and risk management

Feedback topics and key areas of interest

- Creating shared value for local communities, NGOs, and Advancion
- Volunteering, sponsorship and charitable giving
- End-product innovation, new product development, sustainable
 manufacturing and new approach methodologies (NAMs)

Suppliers

How we engage

- Mutually beneficial partnerships with our strategic suppliers
- Supplier Code of Conduct and EcoVadis third-party assessment platform
- Direct engagement with current and prospective suppliers via the advancionsciences.com website or directly via site leaders and our Strategic Purchasing organization

Feedback topics and key areas of interest

• Sustainability-oriented business opportunities

Government and regulatory agencies

How we engage

 Direct engagement with regulators and legislative policy makers at numerous local, national, and international levels through a variety of channels and functions, including manufacturing site leaders, regional business leaders, corporate communications team, trade associations, and legal counsel

Feedback topics and key areas of interest

• Compliance with laws and regulations affecting our business in the jurisdictions in which we operate around the world

Customers

How we engage

- Global network of commercial, Research, Development and Applications (RD&A), and Customer Care teams; and authorized channel partners and distributors
- Customer audits and third-party certifications (e.g., ISO 9001), and other specialized product quality and management system certifications
- Business Code of Conduct, comprehensive business continuity plans, and annual third-party sustainability assessment conducted by EcoVadis

Feedback topics and key areas of interest

- Product quality and safety
- Sustainability performance (e.g., GHG emissions, injury rates, etc.)
- Operational controls, including business ethics and business continuity preparedness

Material issues



Employees and contractors

How we engage

- Targeted and companywide employee communications on business performance and sustainability progress
- Annual employee engagement survey
- Cross-functional companywide Sustainability Steering Team seeks input / participation from employees in a variety of sustainability initiatives
- Develop and track progress against individual, group / team and companywide accountabilities and goals aligned to the Company's sustainability strategy

Feedback topics and key areas of interest

- Proactive and transparent information on Company performance and sustainability progress
- Opportunities to participate in and influence the Company's and customers' sustainability goals

Owners and investors

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How we engage

 Direct engagement to disclose our business and sustainability performance on a regularly scheduled and ad-hoc basis via phone calls, emails, videoconference and in-person meetings, as appropriate

V

 Publish an annual sustainability report in line with GRI and other national or internationally recognized standards, where appropriate, and respond to targeted disclosure requests from investor-focused rating agencies

Feedback topics and key areas of interest

- Transparent reporting on business and sustainability performance
- Engagement on integrated sustainability strategy and key sustainability issues / investment opportunities

Local community engagement, impact assessments and development programs

The local communities in which we operate are one of our most significant stakeholder groups, particularly for our manufacturing facilities in Sterlington and Ibbenbüren where we hold integral positions within these communities. We are committed to being a responsible corporate citizen and a supportive neighbor through active community engagement and outreach initiatives.

This commitment is exemplified by our role as a preferred employer, providing substantial employment opportunities, internships, and comprehensive training and development programs for both long-term employees and young professionals. We collaborate closely with local first responders to enhance emergency response capabilities and facilitate practical training initiatives.

Globally, we encourage our employees to volunteer and support community development. We partner with local charitable organizations to fund medical research and address local health and social needs. Additionally, we support the education of young students and inspire future scientific leaders through sponsorships and investments in STEM education programs.

This approach ensures that we not only meet our business goals but also contribute to the sustainability and well-being of the communities we serve.

Membership associations

We maintain memberships and affiliations with trade associations and non-profit organizations around the world to support global sustainability initiatives and engage regularly with outside stakeholder groups. We actively support and participate in a diverse range of programs and initiatives with a local, national, and global focus on industry, consumer trends and sustainability. Our memberships include, but are not limited to:

- American Chemistry Council (ACC)
- American Coatings Association (ACA)
- Association for the Advancement of Alternatives Assessment (A4)
- Biocom California
- California Life Sciences
- Change Chemistry (formerly Green Chemistry and Commerce Council)
- Drug, Chemical and Associated Technologies Association (DCAT)
- Health and Environmental Sciences Institute
 (HESI)
- Independent Lubricant Manufacturers
 Association (ILMA)
- Michigan State University Research on Ingredient Safety (CRIS)
- New York Society of Cosmetic Chemists (NYSCC)
- Society of Tribologist and Lubricant Engineers (STLE)

Advancion in action

For more than 10 years, our team in Sterlington, Louisiana, has organized an annual giving campaign and golf tournament that has raised close to \$1 million benefiting local charity and development programs sponsored by the United Way. In 2024, the team donated a total of \$126,336 from employee contributions, charity golf tournament, and Company match.

Commitments and metrics

High-performance people and culture

Our people form the cornerstone of our high-performance culture – a culture driven by a steadfast commitment to safety, sustainability, continuous improvement and operational excellence. We foster a growth mindset fueled by innovation and encourage every employee to actively seek and celebrate diverse perspectives. Inclusivity, diversity, and tolerance are not just values we uphold; they are the keys to our success. By welcoming a wide range of talent, we ensure that our organization thrives on varied perspectives and experiences. Each employee contributes to cultivating an inclusive culture where everyone is respected, valued, and empowered to succeed in a safe and supportive environment.

Our recruitment, hiring, training, and promotion practices are rooted in fairness and based solely on business needs and individual qualifications. We are committed to non-discrimination, ensuring equal opportunity regardless of race, color, religion, sex, sexual orientation, gender identity, marital status, national origin, disability, military status, or any other protected characteristic. We maintain a zerotolerance policy towards actions that undermine the well-being of our employees or our core values, reinforcing our dedication to a sustainable and equitable workplace.

2023 quick facts

Our people* *As of December 31, 2023

412 full-time employees



6

part-time or temporary employees

40%

percentage of full-time employees covered by a collective bargaining agreement



Promoting health, wellness and employee development

Our employee benefits and training programs extend beyond basic compensation, playing a vital role in attracting, retaining, and engaging a talented, diverse and motivated workforce. Competitive employee benefits are essential for fostering a supportive and productive work environment, and ensure our team members feel valued and secure, contributing to higher job satisfaction and loyalty. By prioritizing robust benefits, we not only meet the diverse needs of our workforce but also strengthen our organization's reputation as an employer of choice, driving long-term success and growth.

Employee health and wellness

We offer a comprehensive benefits package to all full-time U.S.-based employees and provide similar, market-competitive benefits to our international employees in compliance with local employment laws. These benefits include, but are not limited to:

- Medical
- Dental
- Vision
- Health Savings Account
- Flexible Spending
 Account
- Life Insurance
- Supplemental and Dependent Life Insurance
- Flexible Work
 Schedules
- Paid Time Off

- Employee Assistance
 Program
- Savings and Investment
- Retirement
 Contribution Plan
- Accident Insurance
- Business Travel
 Insurance and
 Assistance
- Parental Leave
- Short- and Long-Term Disability Insurance
- Remote Work Options

Parental leave

Our parental leave policy is crafted to support new parents or those expanding their families, enhancing their experience while bolstering our efforts to attract and retain top talent. Since 2021, our global parental leave policy has provided paternity and adoptive leave for all eligible full-time employees.

Parental leave is crucial not only for the well-being of our employees but also for the healthy development of their families. By offering comprehensive leave options, we empower our employees to bond with their new children and manage the demands of their growing families without undue stress. This commitment underscores our dedication to creating a supportive and inclusive workplace, where everyone can thrive both personally and professionally.

Training and skills development

We believe that exposure to diverse ideas and perspectives empowers employees to approach challenges from different angles, leading to more effective problem-solving and fresh solutions. Our investments in employee training and development are focused on enhancing job performance, increasing job satisfaction, and promoting career growth. Well-trained employees are more adaptable to changing industry demands and can contribute to a more dynamic and competitive organization. Furthermore, ongoing development fosters a culture of continuous improvement, driving both individual and organizational success.

Our comprehensive training and development programs are tailored to local, site-specific, and job-specific needs. Additionally, our online Learning Management System (LMS) covers a broad array of topics, such as material handling, hazard identification, and system and compliance training. While the LMS tracks many global training initiatives, the training data captured primarily reflects training for manufacturing and operations personnel and may not fully encompass all global training activities.

2023 quick facts

Parental leave

	2023	2022	2021
Total number of full-time employees who were entitled to parental leave, by gender	412	433	389
Male	301	317	286
Female	111	116	103
Total number of employees that took parental leave, by gender	5	3	2
Male	2	1	1
Female	3	2	1
Total number of employees that returned to work in the reporting period after parental leave ended, by gender	5	3	2
Male	2	1	1
Female	3	2	1
Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender	5	3	2
Male	2	1	1
Female	3	2	1

Data includes employees from November 2022 Expression Systems, LLC acquisition and excludes interns, temporary workers / contractors and part-time employees.

Employee training and skills development

22,338		2023	2022	2021
hours of training completed in 2023	Total training hours	22,338	25,548	27,125
	Average training hours per full-time employee	54	58	70
54	Average training hours by gender			
average number of training hours	Male	104	72	128
per full-time employee	Female	20	23	25

Data excludes interns, temporary workers / contractors and part-time employees.

Employee accountabilities and annual performance reviews

100%

percentage of all eligible full-time employees who participated in our annual accountability development and / or performance review process in 2023.

A high-performance culture based on accountability

One of the most critical contributors to our success is fostering a high-performance culture based on individual accountability. We believe accountability not only promotes engagement and ownership for achieving our strategic goals, but it also creates the foundation for a healthy and positive work culture. We expect every employee to be responsible for their actions, behaviors, performance and decisions. We support this through our annual accountability development and performance review process, which is designed to:

mitments and metrics

- Define success for Advancion and for each employee.
- Develop achievable targets and plans that are within our control.
- Focus on execution enabled by fact-based decision making and clear accountability.
- Drive proactive discussions between managers and employees on career objectives and provide a diverse range of experiences to employees.
- · Support processes and policies for employee recognition and rewards.
- · Encourage ongoing formal and informal coaching.

Employees and managers are expected to engage in:

- 1. An annual accountability development session where employees and their manager create and approve objectives, competencies, and development plan for the fiscal year.
- 2. A mid-year review between managers and employees to verify alignment, provide support, and confirm progress on overall plan.
- 3. A year-end review to confirm progress on overall plan and competency performance during the year.

Advancion diversity, equity and inclusion data

As of December 31, 2023, Advancion employed approximately 412 full-time employees, portions of which are covered by collective bargaining agreements, as well as 88 contractors, who primarily support the manufacturing, packaging and warehousing operations in Sterlington.

Approximately 40 percent of our employees were covered by a collective bargaining agreement as of December 31, 2023. This includes 97 employees at our Sterlington, Louisiana plant represented by the United Steelworkers Union, and 70 employees at our Ibbenbüren plant who are employed under a tariff agreement.

Freedom of association

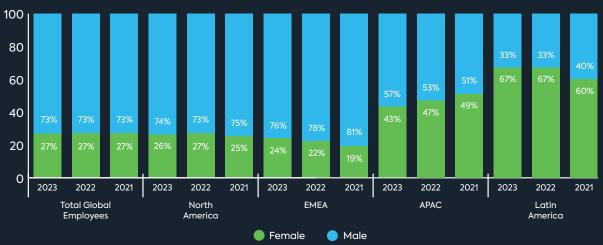
We respect and honor the freedoms of our employees and operate in full compliance with relevant workplace laws and regulations in the states and countries in which we operate, including those associated with organized labor activities. We provide competitive wages and benefits for our employees and promote open dialogue and reasonable workplace practices and policies without the intervention of third parties.

For Advancion locations with employee groups that are unionized and / or covered by a collective bargaining agreement, we recognize the respective employee representative group (e.g., union) as the exclusive representative of the employees in the bargaining unit and complies with all resulting legal and contractual obligations.

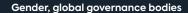
Essential inputs. Extraordinary outcomes

Advancion diversity, equity and inclusion data*

*As of December 31, 2023. Data excludes interns, temporary workers / contractors and part-time employees.

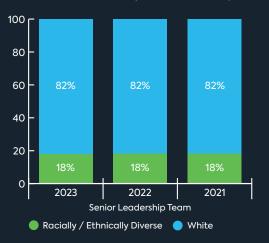


Gender, global full-time employees





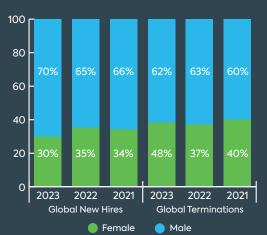
Racial and ethnic diversity, Senior Leadership Team



New hires and employee turnover

The overall voluntary resignation rate for Advancion in 2023 was 11%, compared to 11% and 9% in 2022 and 2021, respectively.

Gender, new hires and terminations



Ethics and compliance

Operating in today's global market means navigating diverse cultural norms, laws and regulations that govern or impact our business. Our commitment to ethics and compliance excellence ensures that we can adapt to and comply with these differences, mitigate risks for our company and foster trust among stakeholders, including customers, employees, investors, and members of our communities.

We require all employees and representatives worldwide to operate with the highest level of integrity and ethical behavior, which includes adhering to the Advancion Code of Business Conduct and other related policies. In addition, all Advancion suppliers are expected to comply with the Advancion Supplier Code of Conduct.

Employees and other commercial representatives must report all suspected ethics concerns through one or more of the various channels available, including management, HR, and the advancionsciences.com website. All reports are handled confidentially, and requests for anonymity are respected.

Committed to 100% compliance

0

number of:

- confirmed incidents of discrimination and there were no legal actions initiated against Advancion or any employee related to discrimination.
- confirmed cases of corruption, and there were no legal actions initiated against Advancion related to anticompetitive behavior, anti-trust or monopoly practices.
- significant fines or non-monetary sanctions for noncompliance with environmental, social or economic laws and / or regulations.
- fines, penalties, or warnings resulting from incidents of non-compliance with regulations or voluntary codes concerning the health and safety impacts of products and services, or their marketing, packaging and labeling.
- substantiated complaints relating to breach of customer privacy and / or loss of customer data.

2023 guick facts

- violations involving the rights of indigenous people.
- confirmed instances of the use of corporate funds to make financial or in-kind political contributions, directly or indirectly. Advancion policy explicitly prohibits the use of corporate funds for political contributions.
- cases of non-compliance for our product and services or any labeling non-compliance.
- products recalled by regulatory authorities in 2023.
- incidents of non-compliance of marketing communications.

In addition, we abide by all applicable child labor laws and do not employ underage workers in our worldwide operations, nor do any of our operations employ forced or compulsory labor. We also expect our supply chain partners to abide by all international regulations and conventions relating to child and forced labor.

At hiring, all our employees worldwide are required to read, understand, and acknowledge several standards, procedures, and policies, including the Advancion Code of Business Conduct, Anti-Corruption, Respect and Responsibility, and other ethics- and compliance-related policies. Our expectation for 100-percent compliance with all applicable international laws, regulations, rules, standards, and regulations in the geographies in which we operate, are regularly reinforced with employees through a variety of channels, including a globally accessible employee intranet, employee training requirements, annual performance reviews, global CEO town halls, internal announcements, and many others.



Environmental, health and safety (EH&S)

Zero-incident culture

Our short- and long-term environmental, health and safety (EH&S) goals are ambitious, and our goal of zero incidents is more than just an aspirational number. It is an operational mindset we expect from every employee that embodies a shared commitment to continuously improving our EH&S performance.

Our EH&S goals are translated into local objectives, targets, and improvement plans at every site around the world. Performance data is collected monthly from all our operational and office locations and progress against the established targets is tracked and reported to senior management and reviewed with the Board of Directors.

Advancion's EH&S Policy is implemented through global and regional policies and standards modeled on international standards, including ISO 14001, ISO 18001, and ISO 9001, Responsible Care® Management System (RCMS), among others, with third-party certification obtained where appropriate.



2023 quick facts

Global safety performance

0.42 total recordable injury rate (2022: 0.65)

0.16 lost-time incident rate (2022: 0.22)

O work-related illnesses (2022: 0) **O** tier 1 process safety incidents (2022: 0)

O motor vehicle accidents (2022: 0)

960,833 total employee hours worked (2022: 916,179)

Occupational health and safety management system

We operate under the Advancion Discipline Management System (AMS) which is designed to ensure operational health, safety, and well-being of all our employees. The AMS organizes a set of common elements into an effective Plan / Do / Check / Act cycle as a "Common Management System" – a simple, common-sense system that benefits Advancion and its stakeholders.

Several additional guidelines cover safety and security issues, such as fire and explosion precautions, the handling of hazardous substances, and the identification of risks associated with chemical production. The AMS also ensures compliance with applicable regulatory requirements such as those from the U.S. Department of Labor Occupational, Health, and Safety Administration (OSHA).

Advancion is certified and adheres to the Responsible Care® Code of Conduct and its

Sustainability Code of Conduct. As part of the certification process, we report on several environmental, health and safety and sustainability metrics annually.

Where deemed appropriate, certain operations are certified to the international management system ISO 9001 and our Ibbenbüren facility is certified to ISO 50001 standards. In addition, Advancion provides cGMP-compliant manufacturing that adheres to current IPEC excipient guidelines for certain products where it is required by external market demand.

NOTE: Contingent staff is defined per OSHA requirements detailed in 29 CFR 1904.31 as those staff who are not employees, but who are under the direct supervision of Advancion on a day-to-day basis. Other on-site contractors are not included in this definition if they have a direct Supervisor on-site. Contingent staff are included in our safety reporting data for 2023.

Precautionary principle

We employ a risk-based management approach for our wholly owned operations, as well as for the supply chain and the products we sell and distribute. Through various audits and inspections of our own operations, those of certain customers and suppliers, as well as external audits by customers and specific certification bodies, we have adopted a preventative approach and adhere to the principles of continuous improvement.

R

Risk assessment

As part of our Advancion Audit Program, internal EH&S experts from each site routinely conduct inspections of workplace and process safety standards by assessing the facilities and establishing corrective measures to tackle the main risks.

Process hazard analyses (PHAs) are conducted periodically by competent personnel at the sites. The PHAs are reviewed at least every five years and updated in the event of modifications.

Whenever modifications are made within our manufacturing facilities, management of change (MOC) procedures are applied, ensuring that no new or additional risks are introduced without being assessed and controlled.

Advancion Discipline Management System (AMS)

Plan, Do, Check, Act

The AMS is the foundation from which specific policies, processes and procedures aimed at the safety and security of employees and the environment are created and implemented.

Incident investigation

Following a work-related incident, we conduct an investigation to identify root cause and associated corrective actions to avoid recurrence. Advancion's internal documents provide guidance on managing investigations, including ensuring that they are conducted using the Apollo Root Cause Analysis methodology. Incident, root causes, and corrective actions are documented using the Apollo tool and then tracked to completion in SpheraCloud.

According to internal processes, Lost-Time Accident and Restricted Work case reports are only closed if an appropriate investigation report is available and filed. Incident reports are closed once that site or department leader verifies that all corrective actions have been taken and that they will prevent recurrence.

Hazard identification and reporting

The AMS serves to avoid work-related illnesses and regulates the identification of occupational health hazards for all Advancion workplaces. The AMS includes defined revision criteria and cycles. For the control measures, the STOP principle must be applied, which defines the hierarchy of measures to be taken to avoid incidents. A comprehensive internal audit system ensures the quality of the end-to-end process and triggers continuous improvement.

To report work-related hazards or near-miss incidents, our employees can either approach their supervisors directly or submit a report using SpheraCloud, a software-based incident reporting and tracking tool. If employees identify a hazardous situation, they are trained to stop the activity and report to their superior. The application of this rule is part of the Advancion Safety Program training and included in on-site orientation training.



Promoting employee health, at work and at home

We actively promote workplace health and well-being to all employees through global policies and programs that ensure a healthy and safe working environment for all employees regardless of their work location. Managing the day-to-day health and well-being of employees is also a responsibility for every operating location, where local management is accountable for developing and implementing tailored programs designed to help motivate employees to develop healthy lifestyles and reinforce their sense of personal responsibility regarding their health.

We recognize the significant importance of work / life balance in contributing to the well-being of employees, and provide a wide range of flexible working arrangements, such as flextime, part-time work, or working from home, as well as the Global Parental Leave Policy implemented in 2021.

In addition, our third-party Employee Assistance Program (EAP) offers free counseling by external specialists in the event of stress (whether workrelated or not), burnout, personal crisis, drug addiction, or other challenging circumstances. Certain Advancion locations also provide voluntary smoking cessation programs to support employees. For drug addiction, Advancion has procedures for treatment through medical plans and in-hospital care, if necessary. Flexible working arrangements can be made and apply to both work-related stress management and unrelated, extenuating circumstances.

Worker participation, consultation, and communication on occupational health and safety

Every Advancion location has established an occupational protection committee or safety team responsible for hosting regular safety meetings for all employees, among other activities. These meetings serve as a regular two-way channel to communicate important site safety and employee health information to local employees, including:

- Health-related issues such as heat stress, fatigue management, and ergonomic practices, while promoting health and wellness programs.
- Findings from recent safety inspections and discuss corrective actions taken or needed.
- Emergency evacuation plans and discuss roles and responsibilities during emergencies.
- Site-specific safety rules and any recent changes to company-wide safety policies.
- Potential hazards on the site and assess associated risks, discussing strategies to mitigate these risks.

Employees can also use this venue as a platform to voice their concerns or suggestions regarding site safety, with a safety team member, or anonymously through the site nurse (if available) or the EH&S Department. All contractors and temporary workers must adhere to the same policies and guidelines as full-time Advancion employees.



Employee training

Upon hiring, all employees and contractors are provided with initial training regarding the health- and safety-relevant aspects of their workstations and roles. Subsequently, employees are required to participate in safety-awareness meetings held on a regular basis and recurrent role-based refresher training based on regulatory requirements as well as specific role- and site-specific hazards.

Customized training courses are also provided for certain types of work and working environments. This training is provided through face-to-face and classroom-style training, interactive media, and online training courses to drive employee's awareness of ergonomics and other occupational safety issues.

Advancion employees around the world work every day to eliminate on-the-job accidents in several ways, including:

- Accident prevention efforts through planning
- Process and facility controls
- Safety training
- Safety committees
- · Safety and environmental audits
- Post-incident investigations and follow-up steps
- Actively Caring program, where individuals are encouraged to intervene and correct unsafe conditions.

All Advancion manufacturing facilities evaluate site-specific EH&S risks through a standardized hazard and risk assessment process. In addition, our manufacturing facility in Sterlington has been evaluated under the Responsible Care® Management System (RCMS).

Occupational health services

At our manufacturing sites in Sterlington and Ibbenbüren, we prioritize health and safety with dedicated on-site occupational health nurses and visiting physicians. These professionals provide comprehensive medical surveillance, handle work-related illnesses and injuries, and offer support for non-occupational health issues. For locations without on-site medical staff, we partner with local clinics to ensure adherence to health protocols and effective management of any work-related health concerns.

Every facility is well-prepared with fully stocked first-aid kits and automated external defibrillators (AEDs). Additionally, we prepare our teams by training volunteer medical responders in first aid, CPR, and AED usage. This proactive approach ensures that we're always ready to address any health emergencies that arise in a safe and responsive environment for all our employees.



Work-related injuries

Our employees take pride in their commitment to health and safety and, overall, we consistently achieve best-in-class safety performance with Advancion injury rates and lost-time incidents that are significantly lower than the U.S. Occupational Safety & Health Administration (OSHA) averages.

Employee and contingent staff safety metrics	2023	2022	2021
Work-related fatalities	0	0	0
Lost-time incident rate	0.165	0.22	0.22
Lost-time injuries	1	1	1
Recordable rate	0.42	0.65	0.65
Recordables	2	3	3
On-site independent contractor safety metrics	2023	2022	2021
Work-related fatalities	0	0	0
Lost-time incident rate	0	0	0
Lost-time injuries	0	0	0
Recordable rate	0	0	0.86
Recordables	0	0	1

*Note: Recordable rate = (# of recordables *200,000) / Hours Worked. Lost Time Incident Rate = (# of LTI *200,000) / Hours Worked

Process safety metrics	2023	2022	2021
Tier 1	0	0	1
Tier 2	2	2	2

We utilize the OSHA-established calculation methodology to report recordable incident rates that are comparable across any industry or group. Using this standardized base rate, any company can calculate their rate(s) and get a percentage per 100 employees. The employee and process safety metrics are tracked closely and thoroughly investigated to prevent recurrence.



Zero is an achievable goal

Our manufacturing sites in Sterlington and Ibbenbüren operated with zero incidents during 2023 – a significant accomplishment that has continued through the first half of 2024. This achievement underscores our commitment to maintaining the highest standards of safety and operational excellence through:

• Comprehensive training programs:

Comprehensive training sessions are conducted regularly to ensure all employees are well-versed in safety protocols and best practices. These programs include hands-on workshops, safety drills, and continuous education on the latest safety standards.

- Enhanced safety measures: We implemented rigorous safety measures, including state-of-theart equipment, regular maintenance checks, and updated safety protocols. These measures are designed to minimize risks and prevent accidents before they occur.
- Employee engagement: We foster a culture of safety by encouraging open communication and active participation from all employees. Safety committees established at both sites allow workers to voice concerns, suggest improvements, and stay informed about safety practices.
- Leadership commitment: Our corporate and site leadership teams demonstrate a strong commitment to safety, lead by example and prioritize safety in all decision-making processes. This top-down approach ensured that safety remains a core value across all levels of the organization.
- **Continuous improvement:** We continuously monitor and review our safety practices, seeking feedback and making necessary adjustments to improve our safety performance. Regular audits and inspections help us identify potential hazards and address them promptly.

Natural resource management and environmental preservation

Energy, water, emissions and waste

The Advancion Sustainability Blueprint and EH&S Management System create the foundation for effectively managing waste production and optimizing resource consumption in production processes, such as raw materials, energy, and water. Our multi-faceted approach integrates strategies focused on natural resource management and environmental preservation into day-to-day business operations contributing to long-term sustainability and reducing our impact on the planet.

Sustainable practices

- **Resource efficiency:** Optimize the use of raw materials, energy, and water throughout the production process to minimize waste and reduce our environmental footprint.
- **Sustainable sourcing:** Source raw materials from suppliers who adhere to sustainable and ethical practices.
- Waste management: Implement robust waste management practices, including reduction, recycling, and safe disposal of chemical waste to prevent environmental contamination.

Technological innovation

- Green chemistry: Invest in research and development to create products and processes that reduce or eliminate the use and generation of hazardous substances and / or leverage the use of renewable resources.
- **Process optimization:** Use advanced technologies such as process intensification, automation, and data analytics to improve process efficiency and reduce resource consumption.
- Emission control: Develop and deploy technologies to capture and reduce emissions of greenhouse gases, volatile organic compounds (VOCs), and other pollutants.

Stakeholder engagement

- **Regulatory compliance:** Adhere to local, national, and international environmental regulations and standards, often exceeding them through proactive measures.
- **Community involvement:** Engage with local communities to understand their concerns and involve them in decision-making processes related to environmental initiatives.
- **Transparency and reporting:** Regularly publish sustainability reports detailing environmental performance, targets, and progress towards goals.

Continuous improvement

- Environmental management systems: Implement and maintain our management systems to systematically manage environmental responsibilities.
- **Performance monitoring:** Continuously monitor environmental performance through key performance indicators (KPIs) and conduct regular audits and assessments.
- Employee training and engagement: Foster a culture of environmental stewardship by providing ongoing training to employees and encouraging their active participation in sustainability initiatives.

Specific initiatives

- Energy efficiency: Invest in energy-efficient technologies and practices to reduce energy consumption and greenhouse gas emissions.
- Water conservation: Implement and optimize watersaving technologies and practices, such as closed-loop water systems.
- **Biodiversity protection:** Take measures to protect and restore natural habitats around operational sites, promoting biodiversity and ecosystem health.

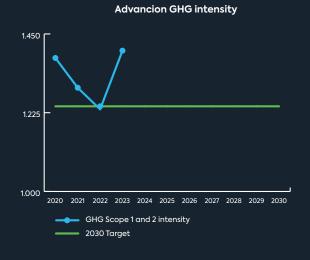
In addition, routine data collection from all operational and office sites ensures a comprehensive understanding of performance, and progress towards established targets is meticulously monitored through senior management assessments supported by independent third-party validation, where applicable.

2023 quick facts

Measuring progress toward our Target 2030 Goals - emissions, energy, waste and water*

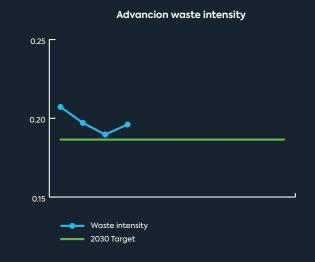
+1.5%

reduction in GHG Scope 1 and 2 intensity (MTCO₂e/MT production)



-7.65 %

reduction in waste intensity (MT/MT production)



-0.5%

reduction in energy intensity (kWh/MT production)



+13.8%

reduction in water intensity (megaliter/MT production)

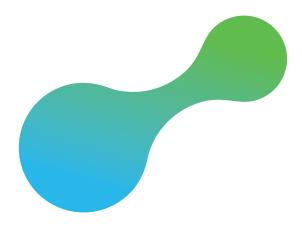


Energy consumption

We purchase off-site electricity from local utilities for all our sites, including our headquarters in Buffalo Grove, Illinois; our manufacturing plants in Sterlington, Louisiana and Ibbenbüren, Germany; and our Expression Systems cell culture manufacturing facility in Davis, California. In 2022, a solar plant was installed at the Ibbenbüren location and is expected to generate 5 GWh/year, which is roughly half the electricity demand needed for activities at the site. Additionally, the Davis location has solar panels installed on the facility to help reduce electricity demand from non-renewable sources.

Energy is also consumed as natural gas at all locations. The Buffalo Grove headquarters and the Davis facility utilize natural gas for building heating purposes and the manufacturing sites utilize it as fuel for site boilers to generate plant steam. The energy consumption metric includes both the total purchased electricity and natural gas. Our energy intensity metric takes that total energy consumption metric and divides it by the metric tons of production.

Energy metric	2023	2022	2021	2020
Total energy consumption (kWh)	654,048,302	728,142,325	716,823,929	662,660,483
Total production (MT)	128,868	156,646	141,211	129,922
Energy intensity (kWh/MT production)	5,075.32	4,648.32	5,076.26	5,100.45
Energy source (kWh)	2023	2022	2021	2020
Total natural gas for fuel	560,151,723	626,328,735	616,837,981	568,872,785
Electricity purchased and consumed	93,896,579	101,813,590	99,985,948	93,787,698
Purchased electricity from non-renewable energy sources	86,885,704	92,616,715	90,283,330	85,114,761
Total purchased or self-generated renewable energy	7,010,875	9,196,875	9,702,618	8,672,937
Total energy consumption	654,048,302	728,142,325	716,823,929	662,660,483



Reducing energy consumption

In addition to our efforts to reduce energy consumption, we have focused on increasing the quantity of renewable energy purchased, where available. In 2023, the Ibbenbüren manufacturing facility sourced 58% of its purchased electricity from renewable energy sources, which are in addition to the electricity generated from the on-site solar plant. At Sterlington, we have organized an energy savings team and enlisted several consultants to identify additional opportunities for reduction of energy consumption in the manufacturing process. We have developed a list of potential projects and associated implementation plans to help us achieve our 2030 energy intensity reduction goal. Several projects have already been implemented, including those centering around optimizing the site boilers which produce steam for plant activities.

Although our energy intensity metric increased for 2023 due to changes to align production rates with slower market demand during the year, the total energy consumption in 2023 was approximately 10% less than the previous year as a result of these projects. We have not calculated specific reductions for energy requirements of products and services. However, as noted in section 302-4, the reduction in energy demand demonstrates that products are being manufactured in a manner that requires less energy overall.

In 2023, a selective catalytic reduction (SCR) unit was installed at our Sterlington facility to treat NO_x (nitrogen oxide) in the flue gas of two boilers. The new SCR unit enables the plant to utilize an additional liquid fuel source in the form of nitroethane, 1-nitropropane and 2-nitropropane manufactured by Advancion during the production of nitromethane. These fuels are then used to supplement the boilers, displacing a portion of the natural gas fuel previously used. The installation of the SCR unit positively impacts several sustainability areas and helps reduce emissions, waste, and overall energy demand at the site. Although the SCR came online late in 2023, its use, together with other operational conservation measures, resulted in an approximately 11% reduction in the total quantity of natural gas needed at the site.

UF-22

Water availability and quality is not only vital for our manufacturing operations, it is also essential for the health and well-being of our surrounding communities.

Protecting water as a shared resource

Water availability and quality is not only vital for our manufacturing operations, but also essential for the health and well-being of our surrounding communities. We are committed to protecting available water supplies as well as treating effluent water prior to discharge in accordance with all applicable regulations.

At our Sterlington manufacturing facility, water is withdrawn from the nearby Ouachita River and treated prior to being used in the process. At our Buffalo Grove headquarters, Davis facility, and Ibbenbüren manufacturing plant, water is obtained from the city water supply grid. Both major manufacturing sites utilize the water in a closed loop water system through the plant's cooling towers to reuse the water as many times as possible prior to discharge. Additionally, before any wastewater is discharged to an off-site receiving water, it is sampled to ensure compliance with applicable regulations.

Management of water discharge-related impacts

We maintain compliance with all applicable effluent quality standards through management systems, including a robust management of change process, incident reporting tool, and operating procedures. The manufacturing sites are designed to include secondary containment measures to prevent chemical releases from impacting the surrounding environment, including the groundwater and nearby surface waters. The sites are also equipped with a variety of administrative, treatment, and operational controls to treat all wastewater parameters to permitted limits prior to discharge.

We utilize a third-party resource, "Aqueduct Baseline Water Stress," from resourcewatch.org to classify the water stress in the areas near the manufacturing plants. Our Sterlington plant is in an area deemed low-medium water stress, while our Ibbenbüren and Davis facilities are in areas deemed medium-high water stress. These rankings indicate that water stress is not currently a concern in these areas; however, this will be periodically re-evaluated as data is updated. Regardless of these rankings, Advancion has placed a priority on identifying measures to reduce water intake.



Responsible water withdrawal

All our sites utilize potable water from the local municipality. Additionally, our Sterlington manufacturing site withdraws fresh water from the nearby Ouachita River in north Louisiana. This represents the largest water withdrawal of all our sites and has been evaluated using EPA's Clean Water Act 316(b) regulations that include a thorough analysis of river conditions and potential impacts from the river water intake system. The analysis was reviewed by the state regulatory agency and applicable standards for the cooling water towers were included in the facility Louisiana Pollutant Discharge Elimination System (LPDES) permit, such as maintaining cycles to reuse water as many times as practicable.

Our water savings team has identified that water withdrawal is the most important metric in conserving water as a natural resource near our sites. Our team has identified a list of water withdrawal reduction projects for our Sterlington site and are currently working with a consultant to develop a trajectory to meet our water conservation goal.

Water withdrawal (in megaliters)	2023		2023 2022 2022		21	20	20	
	Fresh water (≤1,000 mg/L TDS)	Other water (≤ 1,000 mg/L TDS)	Fresh water (≤ 1,000 mg/L TDS)	Other water (≤ 1,000 mg/L TDS)	Fresh water (≤ 1,000 mg/L TDS)	Other water (≤ 1,000 mg/L TDS)	Fresh water (≤ 1,000 mg/L TDS)	Other water (≤ 1,000 mg/L TDS)
Surface water	2,933	-	3,014	-	3,055	-	2,612	-
Ground water	-	-	-	-	-	-	-	-
Third-party water	112	-	149	-	152	-	153	-
Total withdrawal	3,045	-	3,163	-	3,207	-	2,765	-

Responsible water consumption

We define water consumption by adding water withdrawal from river water intakes and third-party sources and then subtracting water discharged back to the river through treated process wastewater outfalls. There is a small portion of stormwater included in the treated process wastewater discharge outfalls. However, we are not currently able to quantify and separate that water source. Our Sterlington facility has two outfalls solely designated as stormwater outfalls and Ibbenbüren has one such stormwater outfall. These totals are not included in the consumption calculation. Our Sterlington plant does include some features designed to reduce stormwater discharge as well as utilizing gravel cover in many areas of the plant to minimize impervious areas in order to allow for more groundwater recharge. Overall, utilizing the water consumption in megaliters divided by the chemical production in metric tons, yields the annual water intensity for Advancion.

Water consumption (in megaliters)	2023	2022	2021	2020
Sterlington	888	857	840	758
lbbenbüren	22	48	49	48
Total consumption	910	905	889	806
Water intensity (megaliter/MT)	0.0070591	0.00577741	0.0062963	0.0062009

Responsible water discharge

Water discharge at our manufacturing sites includes both treated process wastewater and stormwater. The Ibbenbüren plant discharges process waters and stormwaters that may fall in the process area containment to their on-site aeration pond before discharging treated water back into the city wastewater grid, where it is returned to the city water treatment plant. The Sterlington plant has a similar process to direct waste and stormwaters to an on-site wastewater treatment plant where they are treated until the effluent is suitable to return to the Ouachita River.

Priority substances of concern for both manufacturing sites are set by local regulatory agencies. At Ibbenbüren, the local regulations include controlling for waterborne diseases such as Legionnaires as well as ensuring that applicable chemicals have been properly treated. At Sterlington, the outfalls are defined in the LPDES permit set by the state regulatory agency. The permit includes parameters that are analyzed continuously such as flow and pH, weekly parameters such as biological oxygen demand (BOD) and total suspended solids (TSS), and parameters that may only be measured quarterly, semi-annually, or annually such as metals, volatile organic carbons (VOCs), and biomonitoring.

Water discharge (in megaliters)	20	23	20	22	20	21	20	20
	Fresh water (≤ 1,000 mg/L TDS)	Other water (> 1,000 mg/L TDS)	Fresh water (≤ 1,000 mg/L TDS)	Other water (> 1,000 mg/L TDS)	Fresh water (≤ 1,000 mg/L TDS)	Other water (> 1,000 mg/L TDS)	Fresh water (≤ 1,000 mg/L TDS)	Other water (> 1,000 mg/L TDS)
Surface water	-	2,157	-	2,306	-	2,367	-	2,008
Third-party water	-	67.125	-	60.690	-	73.423	-	68.062
Total discharge	-	2,224	-	2,366	-	2,440	-	2,076

In 2023, our water intensity metric increased due to changes to align production rates with slower market demand during the year. However, several projects were implemented that had a positive effect on reducing water intake, such as optimizing the use of our pilot plant scrubber which saved 3,168 gallons for the year. Other projects are targeted to be completed in 2024 and will enable more dramatic reductions in water withdrawal. These include upgrading several locations that are currently utilizing once-through cooling water, as well as further optimizing the efficiency of the wastewater treatment plant in Sterlington by upgrading the osmosis membranes. This project alone is projected to save nearly 6 million gallons of water per year.



Emissions

Energy, greenhouse gases (GHG), and other emissions are managed through the Advancion Management System (AMS) that complies with the American Chemistry Council's (ACC) Responsible Care® program and applicable regulatory statutes. Advancion has utilized a third-party consultant to verify Scope 1, 2, and 3 GHG calculations for 2021, 2022 and 2023.

2023 quick facts



Total Scope 1 and Scope 2 GHG emissons

After reviewing the 2023 data, the team identified several areas for improvement in the calculations. In particular, the density for nitroparaffin heads, a waste stream currently utilized in site boilers at Sterlington to produce steam, was updated using analytical data resulting in a larger CO₂e quantity than previously identified. Additionally, the team identified that because Scope 2 data is reported using location-based accounting that renewable energy purchased for the Ibbenbüren facility should not have been excluded. The renewable energy can be credited using the market-based approach for GHG Scope 2; therefore, we have been in contact with local utilities to obtain the data necessary to share that calculation as well in the next reporting year. These updates were also applied retroactively to previous years to ensure that correct data is reported herein.

These calculations have been utilized to work toward reductions in GHG emissions through workgroups with outside consultants as well as in-house teams. Several projects identified by these teams have already been implemented, such as boiler optimization, the SCR project for treating flue gas from the boilers at Sterlington, and the installation of solar panels at the Ibbenbüren facility.



Ibbenbüren, Germany production facility

Direct (Scope 1) GHG emissions and energy Indirect (Scope 2) GHG emissions

Our Scope 1 and 2 GHG emission calculations were expanded in 2023 to include the Sterlington facility, the Ibbenbüren facility, the Buffalo Grove Corporate Office, and the Expression Systems' site in Davis, California (previous years do not include the data from the Davis facility). Advancion utilized the GHG accounting methodology from the GHG Protocol developed by World Resource Institute (WRI) and World Business Council on Sustainable Development (WBCSD) as a guide to compile the data. The primary GHG compounds accounted for in the current GHG inventory include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). (Note that fluorinated compounds are not a part of Advancion operations and were therefore omitted.)

GHG emissions are represented in metric tons of CO_2 equivalent (CO_2e), which are calculated as the sum of all three GHG compounds multiplied by their Global Warming Potentials (GWP). In the 2021 GHG Inventory, CO_2e is calculated using the 100-year GWPs from the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) (Myher et al., 2013) while the 2022 and 2023 GHG Inventory utilizes the Sixth Assessment Report (AR6) of IPCC (Lee et al., 2023).

Scope 1 GHG emissions are estimated using fuel consumption volumes, emission data collected at the vents and flare stacks, as well as estimation of fugitive emissions, typically based on equations developed by EPA. Scope 2 emissions are estimated using utility consumption rates and the emission factors for the upstream production of the imported utilities and the delivery of these utilities to the Advancion facilities. The emission factors for Scope 2 GHG emissions were obtained from the Emission and Generation Resource Integrated Database (eGRID) by the U.S. Environmental Protection Agency (EPA) for facilities in North America and the European Union GHG emission factor hub for facilities in Europe.

Emissions	2023	2022	2021	2020
GHG Scope 1 (MTCO ₂ e)	146,713	157,779	149,366	147,022
GHG Scope 2, location-based (MTCO ₂ e)	33,991	35,634	33,684	32,451
GHG total (MTCO2e)	180,704	193,413	183,050	179,473
GHG intensity (MTCO ₂ e/MT production)	1.4022	1.2347	1.2963	1.3814

Other indirect (Scope 3) GHG emissions

We worked with a third-party consultant to calculate Scope 3 GHG emissions from our global operations. In 2021 and 2022, our Scope 3 included the corporate headquarters, manufacturing facilities in Sterlington, and Ibbenbüren, as well as warehouses utilized worldwide. In 2023, we also gathered data from our Expression Systems facility in Davis to include in the Scope 3 totals. The WRI / WBCSD "Corporate Value Chain (Scope 3) Accounting and Reporting Standard," Supplement to the GHG Protocol Corporate Accounting and Reporting Standard, 2006 is used as guidance to complete our GHG Scope 3 calculations.

GHG Scope 3 Categories 8 (Upstream Leased Assets), 13 (Downstream Leased Assets), 14 (Franchises), and 15 (Investments) are not applicable to our operations and were therefore excluded per the methodology. Additionally, we did not have data available to calculate categories 10 (Processing of Sold Products), 11 (Use of Sold Products), and 12 (End-of-Life Treatment of Sold Products) in 2021. However, in 2022 and 2023, we were able to obtain and incorporate data for categories 11 and 12. Categories 1 (Purchased Goods & Services) and 2 (Capital Goods) were compiled using spend-based data to obtain metric tons of CO₂e. The remaining categories utilize emission factors from the EF_GREET 2021 (Greenhouse gases, Regulated Emissions, and Energy use in Technologies) model to provide the total metric tons of CO₂e from Scope 3 sources.

2021 was selected as the baseline as this was the first year that the Scope 3 GHG data was compiled. In coming years, and as data is compiled to complete additional Scope 3 categories, we will evaluate GHG Scope 3 reduction opportunities in addition to those already identified for Scope 1 and 2.

GHG Scope 3 (MTCO ₂ e)	2023	2022	2021
C1 purchased goods and services	71,281	147,153	164,468
C2 capital goods	6,006	4,626	8,574
C3 fuel and energy related activities	32,355	27,871	26,612
C4 upstream transportation and distribution	2,650	3,627	3,047
C5 waste generated in operations	2,141	9,783	18,899
C6 business travel	209	168	38
C7 employee commuting	1,407	1,379	1,338
C8 upstream leased assets	Not Relevant	Not Relevant	Not Relevant
C9 downstream transportation and distribution	3,332	4,232	5,729
C10 processing of sold products	Not Evaluated	Not Evaluated	Not Evaluated
C11 use of sold products	12,059	13,868	Not Evaluated
C12 end of life treatment of sold products	90,492	88,670	Not Evaluated
C13 downstream leased assets	Not Relevant	Not Relevant	Not Relevant
C14 franchises	Not Relevant	Not Relevant	Not Relevant
C15 investments	Not Relevant	Not Relevant	Not Relevant
GHG Scope 3 upstream Total	116,049	194,607	222,976
GHG Scope 3 downstream Total	105,883	106,770	5,729
GHG Scope 3 total (MTCO ₂ e)	221,932	301,377	228,705
GHG Scope 3 intensity (MTCO $_2q/MT$ production)	1.7222	1.9239	1.6196

GHG emissions intensity

We calculated GHG Intensity by combining metric tons of CO_2e (which includes CO_2 , CH_4 , and N_2O), from both Scope 1 combustion sources and Scope 2 location-based data for our sites and dividing it by the metric tons of production for that year. We selected 2020 as the baseline year for comparison as is it representative of data that is typical for our annual operations.

Reduction of GHG emissions

Our performance in 2023 was not as expected when compared to previous years. Our team reviewed the data and identified several factors affecting the data, including the calculation adjustments we identified for Scope 1 and 2, the inclusion of our new Davis, California facility, and a reduction in our production rates. Our energy and GHG conservation team has identified a trajectory of projects that are currently being evaluated. Their work previously included the design of a solar panel system in Ibbenbüren and several plant optimization initiatives in Sterlington. Consultants completed a steam survey of the Sterlington site with suggested projects to reduce steam usage and thereby energy needs. These projects were incorporated into our trajectory plan with new project ideas that are currently being evaluated. After evaluation and where feasible, the implementation of these projects will help accelerate progress toward our goals in the coming years.



Nitrogen oxides (NO_x), sulfur oxides (SO_x) and other significant air emissions

Based on our proprietary chemical manufacturing process utilized at the Sterlington facility, it has been determined that operations will mainly impact nitrogen oxides (NO_x) and volatile organic compound (VOC) emissions. The Ibbenbüren plant does track NO_x emissions as well, but not VOCs. As a result, Ibbenbüren data has been reflected in the NO_x values, but not the VOC totals. The Sterlington emissions have been routinely calculated and submitted through the Louisiana Department of Environmental Quality Emissions Inventory (ERIC) using criteria from the Louisiana Environmental Regulatory Code, Title 33:III.919.

 NO_x and VOC Intensity values have been calculated utilizing metric tons of emissions divided by metric tons of production. We have made measurable reductions in VOC emissions through the installation of internal floating roofs at many of the larger aboveground storage tanks in our Sterlington plant. These internal floating roofs act to prevent and contain VOC emissions from chemical products stored there. Additionally, our SCR project installed in 2023 at the Sterlington site boilers is designed to significantly reduce the NO_x emissions generated when on-site nitric-based wastes and fuels are burned in the boilers.

Process emissions	2023	2022	2021
Nitrogen oxides (MT NO _x)	554.003	611.264	539.8
Volatile organic compounds (MT VOC)	225.770	224.710	187.0
NO _x intensity (MT/MT production)	0.004299	0.003902	0.003823
VOC intensity (MT/MT production)	0.001752	0.001435	0.001324

2023 quick facts

NO_x emmisions* *Versus 2022

-9.4% reduction in NO_x emissions



Waste

We are committed to ensuring the proper management of waste generated at all our locations. Waste minimization and management measures are accomplished through the global EH&S policy, adherence to the American Chemical Council's Responsible Care® initiative with relevant industry best practices, and in compliance with applicable regulations. Operational compliance to these waste management requirements is verified through annual plan reviews, periodic internal audits, and regulatory inspections.

Waste generation and significant wasterelated impacts

We maintain dedicated waste storage areas at each facility depending upon the type of waste and the related regulatory requirements. We track all off-site waste through waste profiles and manifests. This records chain ensures that the waste is managed appropriately in a manner that is protective of the environment.

2023 quick facts

Waste* *Versus 2020 baseline

-7.7% reduction in waste intensity

+151% increase in waste diverted to beneficial reuse and energy recovery

Management of significant waste-related impacts

Waste minimization is incorporated into everyday operations at our plants. It is a specific review item for our engineers as a part of new project planning and the overall effectiveness of our waste minimization efforts is evaluated at least annually by our team. We are currently on track for meeting our goal of 10% reduction in waste intensity from a 2020 baseline. This progress has been the result of identifying a use for nitroparaffin fuels in on-site boilers as a result of the SCR project that were previously disposed off-site as hazardous waste as well as other waste minimization practices.

We aim for material circularity whenever possible, and the majority of our waste is diverted from traditional disposal through reuse, recycling, or energy recovery. We have formed relationships with various customers that are able to utilize excess products under our beneficial reuse program. Our facilities ensure materials that can be recycled are managed by appropriate off-site recycling entities that can facilitate a second life for these materials.

Waste generated

We generate both non-hazardous and hazardous wastes that are sent off-site for disposal by a third party. Disposal facilities are selected based on a rigorous review of various parameters including compliance history. We are also a member of CHWMEG, an organization that provides in-depth audit reports to aid in selecting appropriate disposal facilities. Wastes sent to these locations are managed through the manifest system that tracks the waste from cradle to grave. Documentation for these manifests is available from our EH&S Department.

We manage two hazardous waste streams at our Sterlington plant, including a low pH material that is managed in an injection well and a heads stream that is consumed in on-site boilers for steam generation. Both activities have been fully investigated and permitted for compliance with applicable regulations that are protective of human health and the environment. Data on these streams is maintained by our Utilities and EH&S Department as required to ensure compliance.

Each year, we calculate the total waste generated and managed both off-site and on-site. Additionally, we keep a tally of waste diverted through means of reuse or recycling. Starting in 2023, we recorded the waste reused for process inputs in the plant. Calculating the total waste generated as compared to the total waste diverted or managed through energy recovery allows us to ensure that we are working towards circularity with our waste management program. In 2023, 73% of our waste was either diverted or managed through energy recovery.

Waste generation (MT)	2023	2022	2021	2020
Non-hazardous	6,812	8,586	6,476	6,291
Hazardous	18,453	21,793	22,014	21,292
Total waste volumes	25,266	30,379	28,490	27,583
Total waste diverted	8,248	102,547	4,568	3,282
Waste intensity (MT/MT production)	0.196057962	0.19394	0.20175	0.21231



Waste diverted from disposal

Waste minimization efforts are intrinsic to our everyday operations and, as a result, there are several plant processes that divert waste from disposal. In 2023, we identified certain practices already in place at our Sterlington site that facilitate circularity measures. This allows us to manage materials that would have previously been waste as viable commercial products or an alternative energy resource.

In addition, several material streams in our manufacturing process have been designed to be recovered and reused on-site, including methanol recovery, TRIS AMINO[™] slurry, and TRIS AMINO[™] HCl. Although these practices have been in place for several years, in 2023, we started collecting data associated with the amounts of recycled process inputs and other similar waste-diversion activities.

Our standard practice is to rework any material returned to us by a customer to ensure it meets our commercial sales specifications, preventing the generation of waste. We plan to develop metrics for tracking these items in future reports.

We fully investigated recycling options for various waste streams and routine recycling includes spent catalyst, used oil, spent parts washer solvent, scrap metal, concrete, plastic, and universal waste items such as electronics, fluorescent lamps, and batteries. These metrics are included in the waste diversion table.

We implemented another waste diversion tactic through our beneficial reuse options for excess products. Typically, excess materials have been disposed through incineration; however, we were able to locate customers that would be willing to utilize this material in their process at a reduced cost. In 2023, this totaled 3,577 metric tons of materials that would have otherwise been disposed.

Additionally, in 2023, we worked with our local regulatory agency in Sterlington to identify nitroparaffin fuels as an alternative to natural gas for on-site boilers as a part of the SCR installation project. This diverted approximately 4.1 million pounds of material from becoming hazardous waste.

Waste diverted (MT)	2023	2022	2021	2020
Hazardous waste diverted				
Recycled	1,519	2,890	4,186	2,967
Recycled for process inputs	27	-	-	-
Reused	3,577	1,145	-	-
Total hazardous waste diverted	5,123	4,035	4,186	2,967
Non-hazardous waste diverted				
Recycled	2,737	98,511	382	315
Recycled for process inputs	389	-	-	-
Total non-hazardous waste diverted	3,126	98,511	382	315

Waste directed to disposal

We track disposal of materials from cradle to grave for each waste item generated to ensure that they are managed in a manner that is protective to human health and the environment. The EH&S department maintains a database that separates wastes by type (hazardous, non-hazardous), treatment method and whether disposal occurred on-site or off-site. This data is routinely reviewed and utilized to demonstrate compliance with regulatory requirements.

Waste disposal by		2023			2022			2021			2020	
treatment method	On-Site	Off-Site	2023 Total	On-Site	Off-Site	2022 Total	On-Site	Off-Site	2021 Total	On-Site	Off-Site	2020 Total
Hazardous waste (MT)												
Incinerated (with energy recovery)	16,117	186	16,302	16,952	1,864	18,817	17,138	1,072	18,210	16,000	2,041	18,041
Incinerated (without energy recovery)	-	18.86	18.86	-	0.04	0.04	-	671	671	-	3.70	3.7
Injection well	2,132	-	2,132	2,976	-	2,976	3,133	-	3,133	3,247	-	3,247
Total hazardous waste (MT)	18,249	204	18,453	19,928	1,864	21,793	20,270	1,743	22,014	19,247	2,045	21,292
Non-hazardous waste (MT)												
Incinerated (with energy recovery)	-	14.8	14.8	-	6.2	6.2	-	6.7	6.7	-	6.2	6.2
Incinerated (without energy recovery)	-	3	3	-	-		-	-		-	0.0005	0.0005
Landfill	-	3,571	3,571	-	5,701	5,701	-	4,907	4,907	-	6,285	6,285
Injection well	-	3,223	3,223	-	2,879	2,879	-	1,562	1,562	-	-	-
Total non- hazardous waste (MT)	-	6,812	6,812	-	8,586	8,586	-	6,476	6,476	-	6,291	6,291



Product stewardship

We recognize the importance of our responsibility in advancing global sustainability by minimizing the societal impact of our products and our customers' products. Through numerous product stewardship activities and initiatives, we are pushing ourselves beyond the status quo to integrate responsible economic, environmental, and social principles into our global product and service strategies.

In addition, we take advantage of advanced tools such as in silico and in vitro screening methods to build robust programs around chemical safety at early stages in new product development and throughout the product development process. Under this new paradigm, we can implement strategies to strengthen our ability to assess gaps in safety information and target next steps to improve the ability to develop, manufacture and launch more sustainable products. In 2023, 100% of our new chemistries under development were screened using this approach.

Assessment of the health and safety impacts of product and service categories

We conduct a product risk characterization on 100% of our portfolio of products every three years using the American Chemistry Council's (ACC) Product Risk Characterization Tool in compliance with the Responsible Care® Management System Standards. The risk characterization evaluates products to prioritize for which health and safety impacts require special product stewardship programs to mitigate adverse impacts to human health and / or the environment and target product improvement. Additionally, health and safety impacts of products are assessed whenever there is a change in normal use patterns, applications, or markets.

In 2021, Advancion began participating in the ACC Voluntary Sustainability Metrics Reporting which annually tracks six sustainability metrics that include:

- Community engagement
- Greenhouse gas impact
- Air quality
- · Energy efficiency and energy diversity
- Diversity and inclusion
- · Responsible management of hazardous waste

In 2023, we assessed 100% of our portfolio of products to evaluate the revenue derived from sustainable products that promote health, reduce waste or have a positive environmental impact. It was estimated that approximately 54% of Advancion's revenues comes from sustainable products as defined above.

Requirements for product and service information and labeling

We foster dialogue with customers, who are supported in the application and use of Advancion products by our global network of Research, Development and Applications (RD&A) teams specializing in specific end-market applications. Our RD&A employees are strategically located in our six regional Customer Application Centers (CACs) with access to state-of-the-art laboratory and research facilities that leverage our deep and broad applications expertise to solve specific formulation and application challenges for customers. This service offering also features comprehensive product information, particularly with respect to optimum and safe application, health risks, waste disposal, and handling of packaging.

Safety data sheets (SDS) containing the relevant substance data, information on safe handling and storage of products, and measures in the event of incidents such as product spillages / release and fire are provided by Advancion to all parties involved in the handling of the substances. We maintain a close relationship with our customers and provide regulatory data sheets (RDS) for key products that serve as a one-stop-reference for the global regulatory status and key product stewardship information.

Additionally, Advancion undergoes an annual third-party ESG performance assessment to review the impact of our products, operations, and supply chain. We use recommendations from the annual ESG assessment to strengthen our chemical management programs and improve the sustainability profiles of our products.

All Advancion products are covered by and assessed for compliance with the procedures above.

Playing a leadership role in defining sustainable chemistry

With the realization that we are rapidly approaching "planetary boundaries" endangering many of the Earth's ecosystems and the species they support, Advancion embraces a vision of sustainable chemistry as a systems-based approach to practice chemistry that supports a healthy planet for all of its inhabitants.

To advance this concept more universally, Advancion was invited to be a member of the Expert Committee on Sustainable Chemistry (ECOSChem). ECOSChem represents a broad set of constituencies whose aim is to develop a clear and actionable definition of sustainability supported by criteria that could be used to facilitate decision-making in areas such as public policy, education, and corporate investment. It is also intended to guide chemical, material, process and product design and implementation in different settings. The ECOSChem Report on Definition and Criteria for Sustainable Chemistry was published in February 2023.

As a member of ECOSChem, Advancion is supporting sustainable chemistry with a bold vision of continuous improvements for the future of chemistry and global chemical systems designed to provide beneficial products and services for humanity with as few negative human and environmental impacts as possible.

GRI content index

Statement of Use

Advancion Corporation has reported in accordance with the GRI Standards for the calendar and fiscal period starting January 1, 2023 and ending December 31, 2023

GRI 1 Used

GRI 1: Foundation 2021

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	2-10 Nomination and selection of the highest governance body		Confidentiality constraints	Advancion is a privately held company. This
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	2-18 Evaluation of the performance of the highest governance body		Confidentiality constraints	Advancion is a privately held company. This
	2-19 Remuneration policies		Confidentiality constraints	information is considered proprietary and is not
	2-20 Process to determine remuneration		Confidentiality constraints	disclosed by Advancion to third parties.
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