

# Centrient Pharmaceuticals ESG Ambition update

October 2023



## Letter from our CEO, Rex Clements

I am delighted to welcome you to this update on Centrient Pharmaceuticals' Environmental, Social, and Governance (ESG) Ambition. As we reflect on the progress made since our 2021 ESG Report, I am filled with optimism about the direction we are heading and the positive impact we are creating.

Sustainability is at the heart of our daily decisions and integral to our strategic vision leading up to 2030. It underscores our purpose of enhancing the well-being of patients worldwide. In navigating the complex landscape of choices, we focus on areas where our actions can exert the greatest influence.

One such area is our relentless commitment to combatting antimicrobial resistance (AMR). This responsibility holds profound personal meaning for each member of the Centrient family. As a father, I am acutely aware of the value antibiotics hold in safeguarding the health of my children. Our dedication is unwavering, ensuring that these life-saving essentials remain safe and effective not just for my family but for all generations to come.

Concurrently, we champion the development of sustainable biosynthetic production processes for antibiotics and other medications, in alignment with our mission to mitigate the broader social and environmental impacts of pharmaceutical manufacturing. In partnership with our customers, we strive to meet their sustainability expectations, providing them with a platform to achieve their own aspirations.

Moreover, our commitment extends to reducing our direct impact on the environment. Since launching our 2021-2030 ESG Ambition, we have made substantial progress. We've reduced greenhouse gas emissions through energy-efficient projects, increased our use of renewable electricity, and, for the first time, calculated our GHG Scope 3 emissions. We are furthering our commitment by establishing new, more ambitious reduction targets in line with the Science Based Targets initiative (SBTi) and expanding the scope of our targets.

In May 2022, we celebrated a significant milestone by becoming the first in our industry to meet the Predicted No-Effect Concentration (PNEC) discharge targets set by the AMR Industry Alliance (AMRIA) for our oral antibiotic products. We have also optimized water use, notably through efficiency projects in Yushu, China.



Our achievements in social and governance objectives are equally noteworthy. Our Centrient Community Action initiative now reaches wider, and we have increased the representation of women in our senior leadership.

In the coming months, we will conduct a comprehensive review of our ESG ambitions and targets, ensuring alignment with upcoming ESG regulations while remaining dedicated to becoming the preferred global B2B partner in sustainable, enzymatic antibiotics, next-generation statins, and anti-fungals.

Simultaneously, we are taking robust steps to build a more responsible supply chain for our pharmaceutical ingredients, including supplier audits and enhancing our sustainability risk due diligence process.

We recognize that collaboration within our industry is the most potent response to challenges like climate change, environmental preservation, and AMR. Together, we are shaping a brighter world for our children. I extend my deepest gratitude to our partners, stakeholders, and my dedicated colleagues at Centrient for their unwavering support and tireless effort as we work in unison to realize our ambitions.

With optimism and determination,

Rex Clements  
Chief Executive Officer  
Centrient Pharmaceuticals

October 2023

## Focus of this update

This ESG Ambition Update builds on Centrient's ESG Report 2021, published in September 2022.

The first part provides an overview of recent progress against our ESG Ambition, including highlights of our environmental, social and governance performance and other sustainability-related achievements in 2022 and 2023. This information is complemented by the more comprehensive ESG data and information presented in the Appendix.

The second part of this update – Our ESG Ambition in action – highlights a selection of recent initiatives we have undertaken in our various regions to bring our ESG targets to life for our stakeholders, in line with Centrient's long-standing environmental, social and governance commitments.

Please note that this update is not intended to be a full ESG report. The information and data presented in this document are intended to provide a selective illustration of recent progress against specific sustainability- and ESG-related targets, and is not intended to be a comprehensive disclosure of our ESG performance.

Readers can contact [communications@centrient.com](mailto:communications@centrient.com) for further information on our ESG performance or objectives.



Centrient Pharmaceuticals Summer camp, Mexico

## Our recent ESG performance

### Environmental

In line with our 2021-2030 ambition



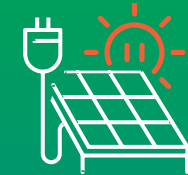
\* compared with base year 2021  
\*\* scope 1 & 2



Achieved SUP elimination in our production sites



Integrated shadow carbon pricing in our project management process



Achieved 16% of renewable energy use in our operations

Maintained Ecovadis gold



Self-certified our sites PNEC compliant\*

\* excluding Astral which was acquired in 2021

### Social



Facilitated **1.5 billion** patient treatments globally



Increased women representation in Board and Leadership roles and in the entire company



15.7K Lives impacted with our CSR activities

### Governance



Achieved 2K hours of global trainings

Achieved 97% PDR completion rate



## Our environmental, social and governance objectives to 2030

E: Minimising environmental impact	S: Improving human health and social impact	G: Acting responsibly
+ <b>35%</b> reduction in carbon emission intensity (2025) and <b>50%</b> by 2030*	+ Increasing access of our life-saving antibiotics to <b>2 billion patients</b> by 2030	+ Several diverse members at Board level, reflecting a balanced composition in accordance with legal requirements (2025)
+ <b>90%</b> of waste repurposed by 2030 and landfill only when no viable alternative available	+ <b>50,000+</b> lives touched by Centrient global community programme annually by 2030	+ <b>100%</b> of eligible employees committed to Code of Conduct (2024)
+ Source <b>50%</b> renewable electricity by 2030	+ High level of employee engagement - in <b>top 10%</b> for our industry (2025)	+ High standard of compliance for data privacy and security according to EU GDPR
+ <b>5%</b> reduction in water consumption (intensity), maximise water recycling and look for options to reduce ground water use by 2030	+ <b>50%</b> gender balance in senior management roles (2025)	+ Continued stakeholder collaboration on ESG topics such as AMR
+ Sites and suppliers compliant with AMR IA Common Manufacturing Framework and Predicted No-Effect Concentration targets	+ Inclusive leadership with <b>less than 8%</b> voluntary attrition	+ High standard of compliance for ESG and financial transparency and disclosure (2025)
+ R&D projects pass Sustainability assessment (2025)	+ Certified human and labour rights compliance in our operations (2024)	+ <b>75%</b> of top suppliers meet sustainability standards (2025)

\*Currently under review as part of our commitment to set SBTi targets

## Our ESG Ambition in action

### Superheroes Against Superbugs: raising grassroots awareness of AMR in India

Superheroes Against Superbugs (SaS) is an India-based public engagement initiative to raise public awareness and encourage community dialogue and action on antimicrobial resistance (AMR). Founded in 2018 by a group of life scientists turned science communicators, the initiative takes the unique step of engaging young people as creative partners in raising awareness about AMR in their communities.

In late 2022 and early 2023, Centrient Pharmaceuticals partnered with both SaS and World Comics India (WCI) to conduct workshops in schools in Rupnagar, Punjab, and Dhunela, Gurgaon.

The workshops used a multifaceted approach to raise awareness about AMR. They included a creative mix of informative and interactive lectures and activity-based sessions, all of which helped students better understand



*“By supporting Superheroes Against Superbugs, we amplifying our impact in the fight against AMR. Our involvement also reinforces Centrient’s commitment to our local communities in India, who find themselves on the frontline of this growing healthcare challenge. By working locally, we hope to generate much-needed awareness about AMR at a local level and build critical grassroots support for our campaign.”*

Devvesh P Srivastav  
Country President India

the potential drivers of AMR and drug-resistant infections, such as irresponsible use of antibiotics, poor hygiene and inadequate infection control.

The sessions also harnessed the power of grassroots comics – a tool often used by NGOs to overcome language barriers and encourage local communication on important social issues. Students were asked to create their own comics in their preferred language – either Punjabi, English or Hindi – to tell the story of antimicrobial resistance. This interactive process gave the workshop facilitators the opportunity to answer questions about AMR and superbugs, helping students understand the concepts

In Rupnagar school, students also developed five-minute dramas about bacterial and human cells, different types of micro-organisms, how infections are spread and what to do if you get sick. These served as a refresher on these concepts and an effective conversation starter. The SaS facilitators also addressed the school and teachers at their morning assembly to share information about the workshop and AMR.

In addition to the students, teachers were actively involved in the workshop discussions to ensure that the message of AMR awareness can be disseminated to future generations of students in these key educational institutions.

## Securing PNEC compliance for our full oral antibiotics supply chain

Commercial manufacturers of antibiotics can be one of the causes of antimicrobial resistance. This is because, in the absence of strong safeguards, antibiotic residues from manufacturing sites can fuel the development of resistance in bacteria. The AMR Industry Alliance (AMRIA), of which Centrient Pharmaceuticals is a founding member, has developed a Common Antibiotic Manufacturing Framework, which includes safe discharge targets for antibiotics known as Predicted No-Effect Concentration Targets (PNECs). Member companies (representing approximately 30% of the global human health antibiotic supply chain) have been on a journey to implement this important standard.

In May 2022, Centrient Pharmaceuticals secured compliance with the AMRIA's PNEC discharge limits for the majority of our oral antibiotic product line becoming the first company in our industry to do so.\* This confirms compliance for Centrient's oral antibiotics supply chain, including our own oral antibiotics manufacturing sites and those of our suppliers.

This important achievement represents a significant milestone in our responsible manufacturing journey as we strive to reduce our environmental impact and take a leading role in the fight against antimicrobial resistance (AMR). It also underlines our commitment to the PNEC discharge targets set out in the AMRIA Common Manufacturing Framework.

The targets represent the concentration of antibiotics in water that does not pose a risk of adverse environmental effects or the development of AMR. They cover approximately 120 active pharmaceutical ingredients used in the manufacture of antibiotics. Each antibiotic has a specific PNEC, which is published in the AMRIA table of recommended PNECs for risk assessment.

Going forward, we aim to align our wider manufacturing ecosystem and supply chain with the AMRIA Common Manufacturing Framework and PNEC targets. We also continue to encourage our peer companies to join the fight against AMR by signing up to the Common Antibiotic Manufacturing Framework. In doing so, we hope to help broaden the uptake and impact of science-based PNEC standards across the wider pharmaceutical value chain.



*“Rigorous compliance with industry environmental standards is of primary importance to everyone at Centrient Pharmaceuticals, and it is integral to my work as Technical Operations Officer. I am therefore delighted that Centrient has met AMRIA’s PNEC discharge limits for a key component of our product offering and supply chain. It represents a major stepping stone in our environmental ambitions and our efforts to tackle AMR.”*

Vesna Kapelj  
Chief Technical Operations Officer

\*The antibiotic manufacturing facilities operated by Centrient's recently acquired subsidiary, Astral SteriTech, have yet to achieve full compliance with the PNEC discharge limits. At the time of publication, efforts to achieve compliance at these facilities are pending due to the temporary suspension of production at the facilities in question.

## EcoVadis: key validation for our sustainability leadership

EcoVadis is the world's most trusted provider of corporate sustainability ratings, providing detailed assessments of companies' environmental, social and ethical performance. The rating methodology has been developed in line with leading ESG standards, including the Global Reporting Initiative (GRI), INGC and ISO26000, and is overseen by an international scientific committee. EcoVadis Ratings have been tested on more than 100,000 companies in over 200 industries and 175 countries.

In November 2022, Centrient Pharmaceuticals once again secured a Gold EcoVadis Sustainability Rating, placing us in the top 5% of all companies assessed by EcoVadis.

To achieve the rating, Centrient underwent a rigorous assessment process covering seven management indicators across twenty-one sustainability criteria. The EcoVadis assessment model is based on four themes: Environment, Labour and Human Rights, Ethics and Sustainable Sourcing, with Centrient receiving an Advanced rating in all four categories.



The outcome of the assessment underlines our commitment to environmental and social sustainability as part of our wider ESG Ambition. It also reinforces our continued position as a sustainability leader in the generics industry. This important certification demonstrates the progress we are making towards our purpose of improving lives through the innovative and sustainable manufacture of medicines.

*“The external validation of our sustainability-related activities is essential in knowing we are on track to realise our ESG Ambition. What’s more, we fully support the EcoVadis programme as a platform to create a level, industry-wide playing field for sustainability. It’s a key piece of the jigsaw in shaping a more responsible and transparent value chain.”*

Jean-Luc Giraud  
Communications & ESG Officer





## Supporting firefighters in the Sierra de Arteaga, Mexico

Forest fires are a growing problem in Mexico. One of the most vulnerable areas is the Sierra de Arteaga mountain range, which straddles the states of Coahuila and Nuevo León and includes a densely forested area known as ‘La Carbonera’. In May 2022, a family barbecue led to the outbreak of several major fires, which together consumed 2,500 hectares of forest and displaced more than 200 families. With the local fire brigade overstretched, assistance was sought from neighbouring fire brigades as well as local volunteers. However, a lack of personal protective equipment was a major concern.

With our regional headquarters in nearby Ramos Arizpe, Coahuila, Centrient Pharmaceutical’s Mexico team decided to support the firefighting efforts. Employees at Centrient’s Mexico facility and their families were encouraged to donate personal protective equipment and tools, as well as medicines and hydration drinks, to assist those fighting the blaze. The items were then donated to the Arteaga Fire Department.

As a follow-up to this initiative, Centrient employees took part in a sponsored 5km and 10km run in nearby Saltillo, organised by the city’s environmental association, Saltillo Ecológico. The aim of the event was to raise funds for the reforestation of ‘La Carbonera’. With the money raised through sponsorship, 752 pine trees were planted by a group of volunteers.



Our involvement in these initiatives underlines Centrient’s commitment not only to supporting the local communities in the regions where we operate, but also to protecting the local environment.

*“Our teams in Mexico have always had a strong relationship with our local communities, so it’s important they can call on us for help when needed. It was fantastic to see Centrient employees lending a hand to this important initiative.”*

Carlos Piña  
HR Director, Mexico

## Eliminating single-use plastic from our locations

The world is facing a plastic pollution crisis that threatens the future of our planet, with an estimated 33 billion pounds of plastic entering the ocean every year. This annual amount is expected to nearly triple by 2040.

In December 2022, Centrient achieved its goal of eliminating single-use plastics (SUPs) from its owned (non-leased) offices and canteens worldwide by 2023. This important environmental project began in April 2021. It was overseen by a global project team comprising members from Centrient's Global Purpose Platform (GPP), a company-wide group comprising early-career professionals united by their commitment to having a positive impact on our communities.

The project team began by conducting an online employee survey to better understand the type and amount of SUP items being used in Centrient's offices and canteens. Using the information from the survey, the team developed a comprehensive approach to eliminating SUPs from Centrient's facilities. In December 2021, the elimination strategy was piloted at the company's facilities in Yushu, China and Delft, the Netherlands, and was completed in May 2022. From the pilot, the team was able to develop a set of learnings and best practices to inform the wider implementation of the project at Centrient's facilities around the world.

By the end of 2022, Centrient had substantially eliminated the use of single-use plastic products from all offices and canteens globally, with the exception of the very limited use of SUPs at our sites in Gurgaon, India and Rijswijk, the Netherlands.

*“As a sustainable company, it's important that Centrient takes action on this important environmental issue. We're making good progress with our SUP-elimination programmes around the world. It just shows what can be achieved when our different sites work together in unison!”*

Shashank Singhal,  
GPP Lead



## Annex

### Employee gender information

	Female		Male		Overall	
	2021	2022	2021	2022	2021	2022
<b>Permanent employees by gender</b>	357	365	1,500	1,496	1,857	1,861
<b>Full-time employees by gender</b>	336	344	1,486	1,483	1,822	1,827
<b>Leadership positions at Centrient</b>	23	27	65	66	88	93

### Region

	2022			2021		
	Female	Male	Overall	Female	Male	Overall
<b>Americas</b>	65	268	333	64	294	358
<b>Asia</b>	123	399	522	124	389	513
<b>EMENA</b>	105	232	337	100	225	325
<b>IBAP</b>	72	597	669	69	592	661
<b>Total</b>	<b>365</b>	<b>1,496</b>	<b>1,861</b>	<b>357</b>	<b>1,500</b>	<b>1,857</b>

### Performance and development review completion

	2021	2022
<b>% of employees completed PDR</b>	92%	97%

### Employee training

	2021	2022
<b>Total Training hours per year</b>	3,026	1,637
<b>Total Training hours per employee per year</b>	1.63	0.88

### Employee engagement

	2021	2022
<b>Employee engagement score</b>	77/100	79/100

### Employee attrition

	2021	2022
<b>Employee attrition %</b>	14.40%	9.80%

### Safety performance (employees and contractors)

	2021	2022
<b>Total number of work-related recordable injuries</b>	10	10
<b>Total number of work-related fatalities</b>	0	0
<b>Recordable injury rate (per 200,000 work-hours)</b>	0.33	0.34

## Number of patient treatments facilitated by product

	2021	2022
SSPs API	903.7mln	824.2mln
SSPs FDF	59.1mln	145.1mln
SSCs API	422.9mln	382.3mln
Statins API	108.2mln	136.7mln
Statis FDF	5.9mln	9.8mln
<b>Total patient treatments</b>	<b>1,500mln</b>	<b>1,498mln</b>

## Lives touched through our Community Actions

	2021	2022
Number of lives impacted	12,500	15,700

## Process safety

	2021	2022
Number of PSIs (Process Safety Incidents)	7	13
Losses of Primary Containment (LOPCs)	27	194

## PSCI Audits

	2021	2022
Number of audits completed	13	5
Audits on Centrient	4	4

## Management diversity information

	Female		Male		Overall	
	2021	2022	2021	2022	2021	2022
Centrient Executive Committee	1	1	9	9	10	10
Centrient Board of Directors	1	1	3	2	4	3

## Code of Conduct certification

	2021	2022
% of Employees that completed the Code of Conduct training	97%	96%

## Whistleblower program

	2021	2022
Number of cases reported	20	21
% Investigations in progress	5%	38%
% Investigations completed	95%	62%

## Stakeholder engagement activities

	2022
External advocacy events	6
Media outreach	7
Customer communications	6
Integrated engagement events	6
<b>Total engagement activities</b>	<b>25</b>

## IT & Awareness campaigns & training

	2022
Number of campaigns	5
% of employees reach	82%

## PNEC compliance

Site	PNEC Compliant
Delft	Yes <sup>(*)</sup>
Spain	Yes <sup>(*)</sup>
Mexico	Yes <sup>(*)</sup>
Toansa	Yes <sup>(*)</sup>
Yushu	Yes <sup>(*)</sup>
Zibo	Yes <sup>(*)</sup>
Astral	Expected by October 2023

\*Self-certified compliance

## Single use plastics volumes

	2021	2022
Single-use plastics in our production sites (SUP) Kg	2,400	0

## Energy use

	Source	Unit*	2022
Onsite generated energy	Natural gas	MWH	41,030
Onsite generated energy	Coal	MWH	166,829
Onsite generated energy	Fuel Oil	MWH	60,624
Onsite generated energy	From renewable sources (solar and biogas)	MWH	193
<b>Total on-site generated energy</b>		<b>MWH</b>	<b>268,675</b>
Purchased energy	Purchased electricity	MWH	306,598
Purchased energy	Thereof - Purchased renewable electricity	MWH	55,093
Purchased energy	Thereof - Purchased renewable electricity	%	18%
Purchased energy	Purchased steam	MWH	30,971
<b>Total Purchased Energy</b>		<b>MWH</b>	<b>337,569</b>
<b>% or Renewable Energy</b>		<b>%</b>	<b>16%</b>

\*MWH: Megawatt hour

## Greenhouse gas (GHG) emissions

	Source	Unit*	2022
Scope 1	Natural gas	MT of CO <sub>2</sub> e	8,245
Scope 1	Coal	MT of CO <sub>2</sub> e	103,416
Scope 1	Fuel Oil	MT of CO <sub>2</sub> e	18,855
Scope 1	Other sources (e.g. refrigerants)	MT of CO <sub>2</sub> e	6,127
<b>Total Scope 1 emissions</b>			<b>136,734</b>
Scope 2	Electricity purchased - Market - based		145,740
<b>GHG Scope 1 and 2 production intensity</b>		<b>tCO<sub>2</sub>e/ton of product</b>	<b>19.4mln</b>
Scope 3	Category 1 - Purchased goods and services	MT of CO <sub>2</sub> e	248,028
Scope 3	Category 2 - Capital goods	MT of CO <sub>2</sub> e	11,679
Scope 3	Category 3 - Fuel- and energy-related activities	MT of CO <sub>2</sub> e	63,331
Scope 3	Category 4 - Upstream transportation and distribution	MT of CO <sub>2</sub> e	13,556
Scope 3	Category 5 - Waste generated in operations	MT of CO <sub>2</sub> e	2,813
Scope 3	Category 6 - Business travel	MT of CO <sub>2</sub> e	462
Scope 3	Category 7 - Employee commuting	MT of CO <sub>2</sub> e	3,832
Scope 3	Category 8 - Upstream leased assets	MT of CO <sub>2</sub> e	-
Scope 3	Category 9 - Downstream transportation and distribution	MT of CO <sub>2</sub> e	5
Scope 3	Category 10 - Processing of sold products	MT of CO <sub>2</sub> e	14,008
Scope 3	Category 11 - Use of sold products	MT of CO <sub>2</sub> e	-
Scope 3	Category 12 - End-of-life treatment of sold products	MT of CO <sub>2</sub> e	374
Scope 3	Category 13 - Downstream leased assets	MT of CO <sub>2</sub> e	-
Scope 3	Category 14 - Franchises	MT of CO <sub>2</sub> e	-
Scope 3	Category 15 - Investments	MT of CO <sub>2</sub> e	-
<b>Total Scope 3 emissions</b>		<b>MT of CO<sub>2</sub>e</b>	<b>358,783</b>

\*MT: Megaton

## Water withdrawn by source

Source	Unit*	Total		Water stressed areas	
		2021	2022	2021	2022
<b>Potable water</b> (< 1,000 mg/L total dissolved solids)	ML	1,236.6	1,093.3	0	0
<b>Surface water</b>	ML	0	0	0	0
<b>Ground/well water</b> (< 1000 mg/L total dissolved solids)	ML	2,131.2	1,860.5	369.4	210
<b>Third-party water</b>	ML	0	0	0	0
<b>Produced water</b>	ML	0	0	0	0
<b>Sea water</b>	ML	0	0	0	0
<b>Total water</b>		<b>3,367.8</b>	<b>2,953.8</b>	<b>369.4</b>	<b>210</b>

\*ML: Megalitre

## Sustainable Procurement

PSCI Audits	2022
Number of PSCI Audits executed on suppliers	5
Number of PSCI Audits received	4
<b>Supplier code of conduct adherence</b>	
% of suppliers that signed our Code of conduct	100



## Contact details

For questions regarding this ESG Ambition update, please contact:

Centrient Pharmaceuticals B.V.  
Sir Winston Churchillaan 299  
2288 DC Rijswijk  
The Netherlands  
[info@centrient.com](mailto:info@centrient.com)