

# Building a resilient future: our journey in climate and nature

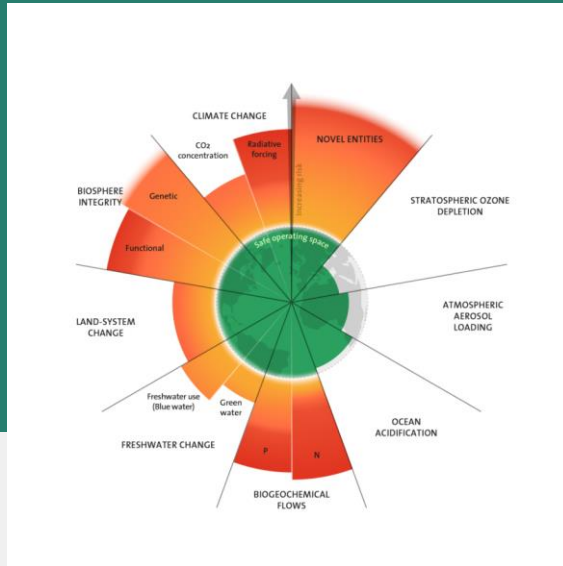
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VP Climate and Nature

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dsm-firmenich 

# The state of our planet

Our business does not operate in isolation – we are plugged into the wider ecosystem around us



In 2024, the Planetary Health Check from the Stockholm Climate Resilience Centre indicated that **six of the nine planetary boundaries have been substantially breached**

Source: Azote for Stockholm Resilience Centre, based on analysis in Richardson et al 2023.) Attribution: CC BY-NC-ND 3.0

Region	Rank (out of 85 years)
Globe	1st highest 2nd - 2023
Europe	1st highest 2nd - 2020
Arctic	4th highest 1st - 2016
Extra-polar ocean	1st highest 2nd - 2023

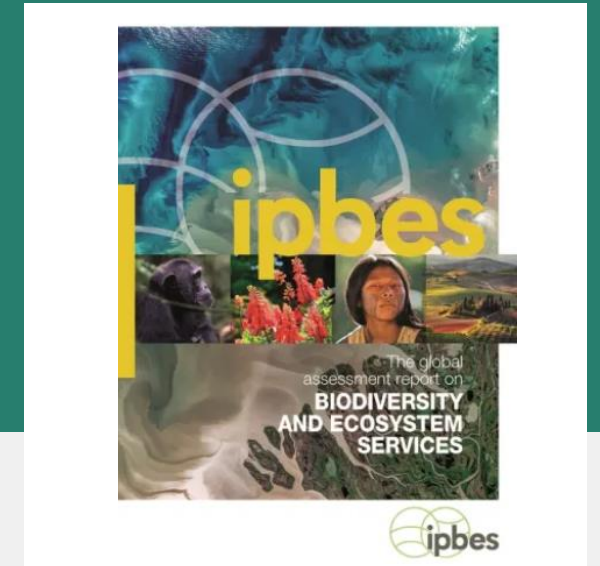
The 2024 Copernicus Global Climate Report confirmed that **last year was the warmest on record**, with the first-ever average annual temperature above 1.5°C

Source: Copernicus Global Climate Report 2024 confirms last year as the warmest on record, first ever above 1.5°C annual average temperature



UN says that we are facing an **unprecedented water crisis**, with global freshwater demand predicted to exceed supply by 40% by 2030

Source: freshwater demand will exceed supply 40% by 2030, say experts | world economic forum



IPBES warns that **nature is declining globally** at rates unprecedented in human history

Source: ipbes – The global assessment report on biodiversity and ecosystem services

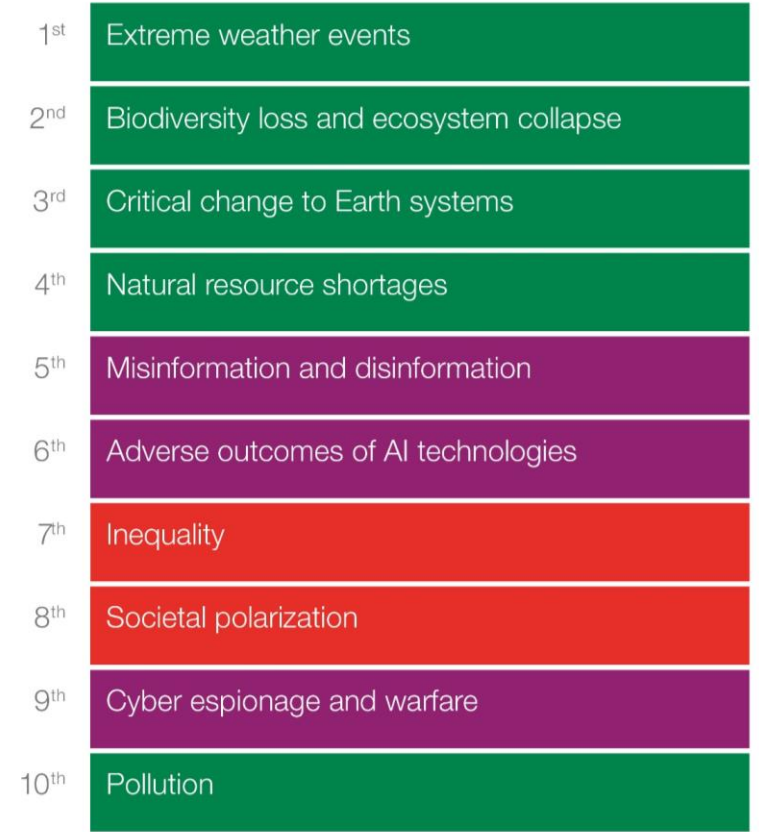
# Planet risks and opportunities

Impact of environmental risks have worsened in intensity and frequency

## Short term (2 years)



## Long term (10 years)



### Risk categories



Source: WEF – The Global Risks Report 2025 20<sup>th</sup> Edition INSIGHT REPORT



## Our three Planet focus areas



### Accelerate climate action

- Climate change mitigation
- Climate change adaptation
- Avoided emissions
- Shift to more sustainable proteins



### Safeguard nature and biodiversity




- Deforestation-free supply chains
- Sustainably sourced agricultural inputs
- Ecosystem protection and restoration
- Improved biodegradability

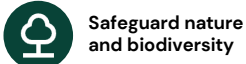


### Conserve our planet's resources




- Water stewardship
- Waste management
- Circularity for resource efficiency

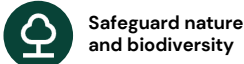
# Our overarching planet framework guides our actions across the value chain and beyond

	Climate change mitigation 			Climate adaptation	Nature positive  
	Reducing our own emissions	Reducing the emissions of others	Increasing permanent carbon removals	Increasing resilience	Progressing on water, biodiversity & forests
In our own operations	Reduce our direct emissions & procure renewable energy: Scope 1 & 2	Collaborative customer and consortia projects on waste, transport, renewable energy, etc.	Carbon removals in our own operations	Protect our operations from physical risks	Reducing our operational impact: water stewardship, waste management
In our up or downstream value chain	Reduce our indirect emissions : Scope 3	Reduce the emissions of others through our products & services (avoided emissions)	Carbon removals in our supply chains	Protect key supply chains from physical risks	Reducing the impact of what we source and of products: deforestation, biodegradability
Outside of our value chain					Landscape level restoration through collection action






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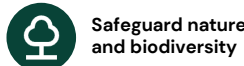
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 Safeguard nature and biodiversity

 Conserve our planets resources

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# We are following the science to drive down our emissions

Building on our leadership foundation with newly validated, 1.5°C aligned Science Based Targets



## Scope 1 & 2



Reduce absolute Scope 1 & 2 GHG emissions by 42% by 2030 from a 2021 base year



## Scope 3



Reduce absolute Scope 3 GHG emissions by 25% by 2030 from a 2021 base year



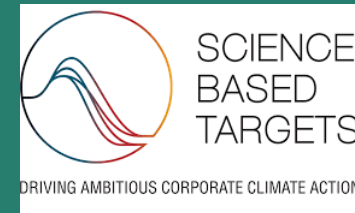
## Purchased renewable electricity



Increase active annual sourcing of renewable electricity from 76% in 2021 to 100% by 2025 and continue active annual sourcing of 100% renewable electricity through 2030

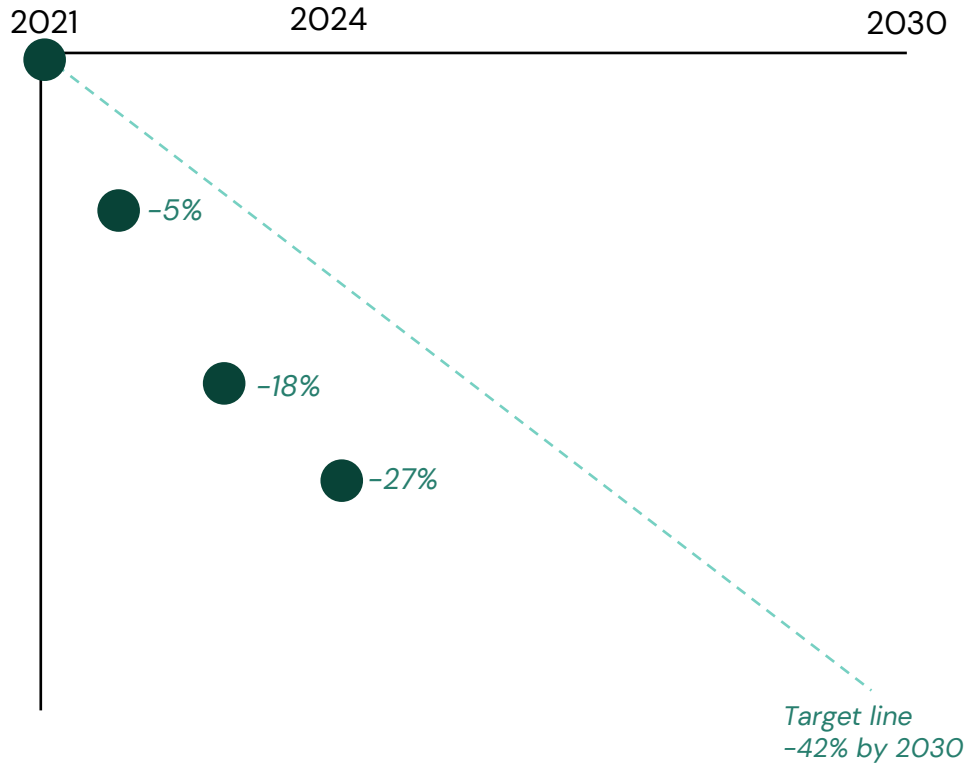
## Overall Net-Zero target

dsm-firmenich commits to reach net-zero greenhouse gas emissions across the value chain by 2045



# Climate progress

## Scope 1 & 2: near-term



## Our scope 1 & 2 program delivering emission reductions and real business value

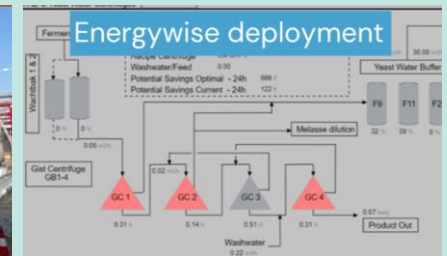
### Improving our sites energy efficiency

- A global, multi-year plan enabled by securing dedicated sustainability capex
- Implementing operational optimizations, rolling out energy basics, selecting state-of-the-art equipment as well as optimizing processes, etc.

### Transitioning towards renewable energy

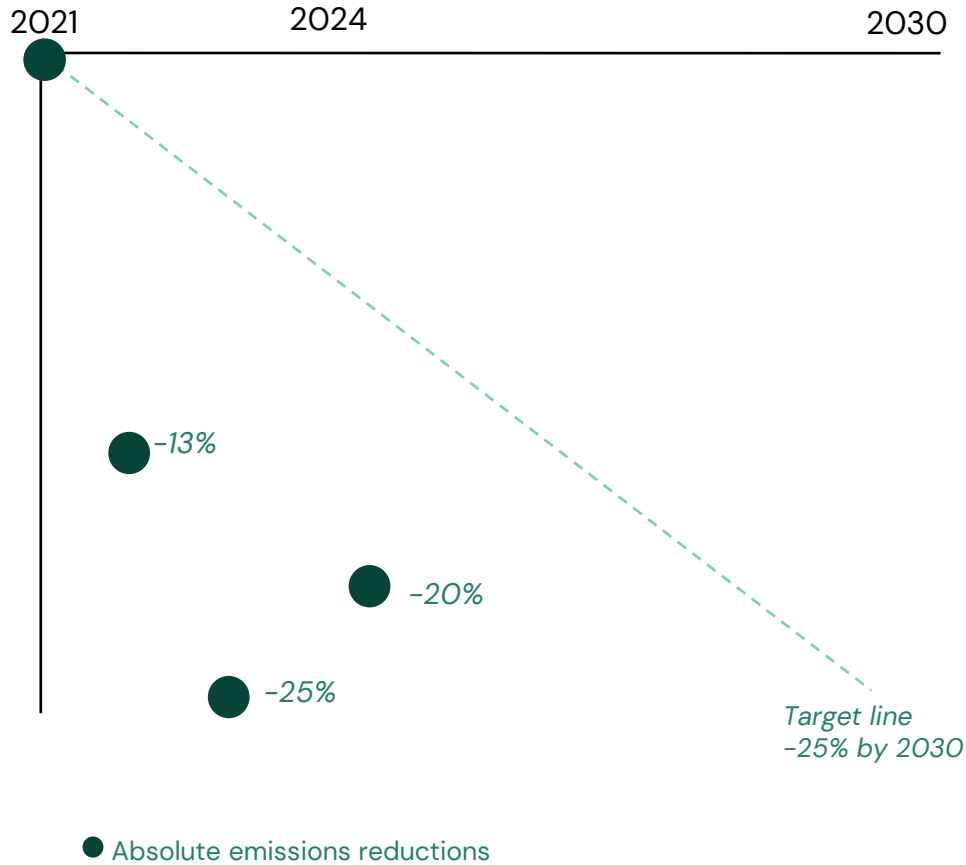
- Member of RE100 committed to 100% purchased renewable electricity
- Increasing the share of renewables sources for heat and steam

### Lower emissions + improved operational efficiencies + lower costs + building more resilient operating sites



# Climate progress

## Scope 3: near-term



# Data and collaboration are key to driving our progress on our value chain emissions

## Joining forces for NetZero

Working closely with our supply chain to drive progress on scope 3 through:

- Expectation setting in the Responsible Sourcing Standard
- PACT aligned primary data collection from suppliers



## Improved data and analytics

Improving our data to more accurately track impact and identify hotspots and opportunities for action

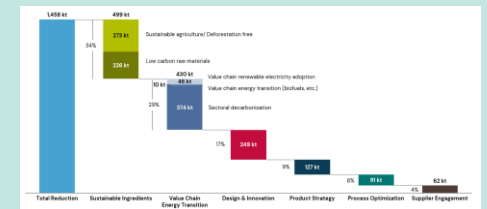
- Implementation of robust internal controls
- Data harmonization, reporting and visualization



## Scope 3 reduction roadmaps

Development of bottom-up project-based roadmaps across all BUs

- Cross-functionally developed category 1 roadmaps
- Renewable fuel and waste roadmaps at sites
- Network optimization and load consolidation



# Building a more resilient business by identifying our climate risk hotspots

## Making our operations more resilient

Enhanced knowledge of the **physical risks in our own operations** and adaptations



High level screening of most material sites completed; **five on-site deep dives executed in 2024:**

- Heatwave, drought, and extreme precipitation/ flood are the primary (future) hazards
- **Adaptation measures** included in business continuity planning and our water stewardship program

## Protecting resilience in our value chains

Identifying the **physical risks in our value chain**



High level screening of key Tier 1 suppliers complete; **~300 supplier locations screened in 2024**

- Follow up with key suppliers planned for 2025
- Initial assessment of **seven natural ingredients**; additional assessments and follow up in progress

## Embedding resilience within our business

**Transition risks & opportunities** as part of our standard business processes

Assessments carried-out for **~50% of our business**, executed at Business Unit and Group level

- Impacts assessed **across own operations and value chain** within the Business Unit
- To be reviewed and expanded in 2025 (in progress)



“With climate change and business continuity, it is often necessary to take action now for a risk that may only occur ten years from now”



# Innovation that also drives emissions reductions for our customers

Bovaer®



220kt CO<sub>2</sub>e avoided by the end of 2024

Brewing Enzymes



143kt CO<sub>2</sub>e avoided in 2024

Waterless formulations



91% less water usage  
42% emissions in the supply chain

Aligning to the developing WBCSD methodology for avoided emissions

# Safeguarding nature and biodiversity & conserving our planet's resources

Our customers are demanding action across the broad area of Nature



- Maintain **no deforestation** across our primary deforestation-linked commodities
- 95% volume of key crops to be verified as **sustainably sourced** by 2030
- Implement **regenerative agriculture** practices on 1 million hectares of agricultural land by 2030
- Help **protect and restore** 1 million hectares of natural ecosystems by 2030
- Implement **water stewardship programs** in 100 locations in water-stressed areas by 2030

## natura &co

- Achieve verified **deforestation – and conversion free** critical supply chains by 2030
- Contribute to the **protection and/or regeneration** of 3 million hectares of Amazon forest and increase to 45 agro-extractivist sourcing communities
- Contribute to the bioeconomy using innovation to develop 55 Amazonian **ingredients from biodiversity**
- 30% of key ingredients to be produced using **regenerative practices**



- By 2025, Nestlé aims for 20% of its key ingredients to be **sourced from farmers adopting regenerative agriculture practices** and 50% by 2030
- By 2030, Nestlé aims for 100% of **key ingredient volumes to be responsibly sourced**
- By 2025, Nestlé aims to achieve and maintain 100% assessed **deforestation-free primary supply chains**: meat, palm oil, pulp and paper, soy, sugar, cocoa, and coffee



## Building our Nature strategy

Safeguarding nature and biodiversity & conserving our planet's resources requires us to protect and restore...

Forests



Water & oceans



Biodiversity



... through four initial 2030 targets

- 100% key natural ingredients **responsibly sourced**
- 10% **water intensity reduction** at our sites in water-stressed areas
- 90% of our washable products will be **ultimately biodegradable**
- Advancing **nature positive** projects (TBC H2 2025)



# Building a resilient business by understanding our impact on Nature and prioritize where and how we need to act

Critical for our licence to operate

## Building business resilience and continuity

Understanding our dependencies, impacts, risks and opportunities

## Through science-based analysis

Building a holistic and science-based ambition and targets

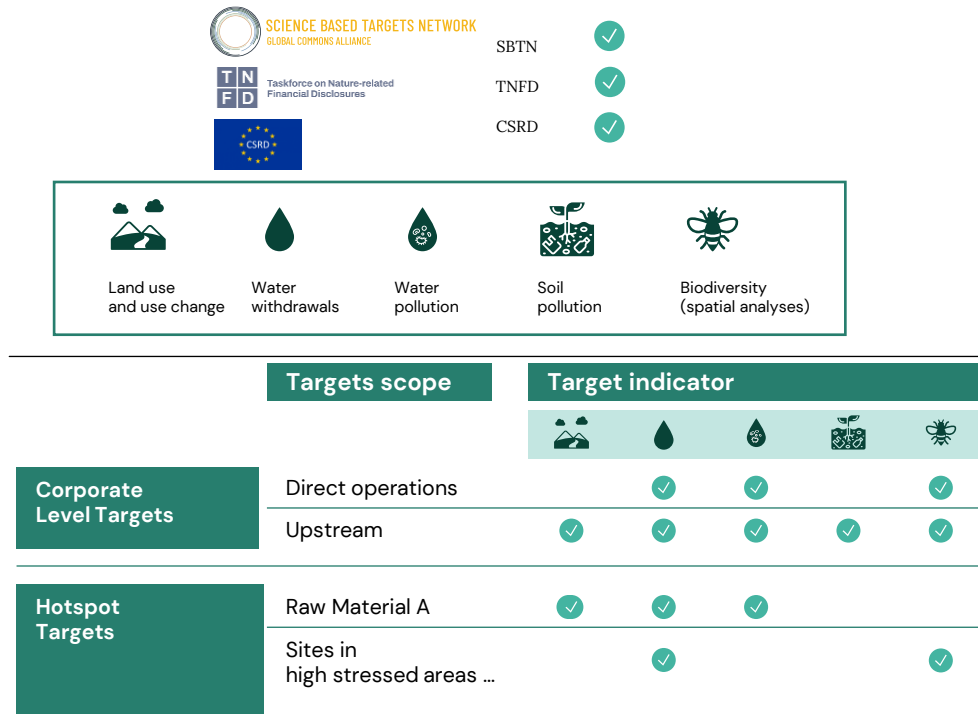
## Prioritizing where we have the biggest impact

The cost of action on water-related risks is estimated 5 times lower than the cost of inaction<sup>1</sup>

x5

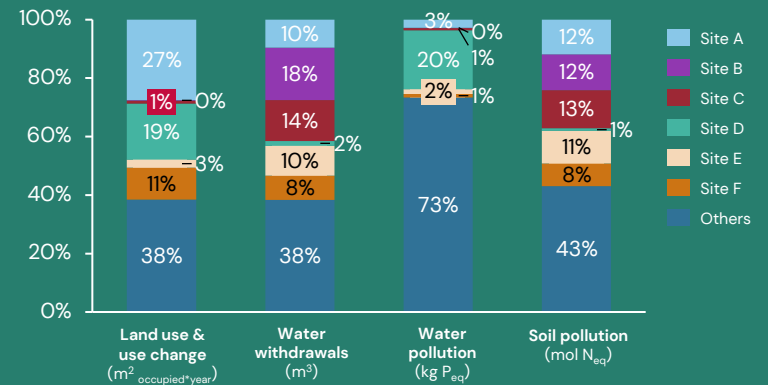
The cost of action on biodiversity-related risks is estimated to be half of the cost of inaction<sup>2</sup>

x2

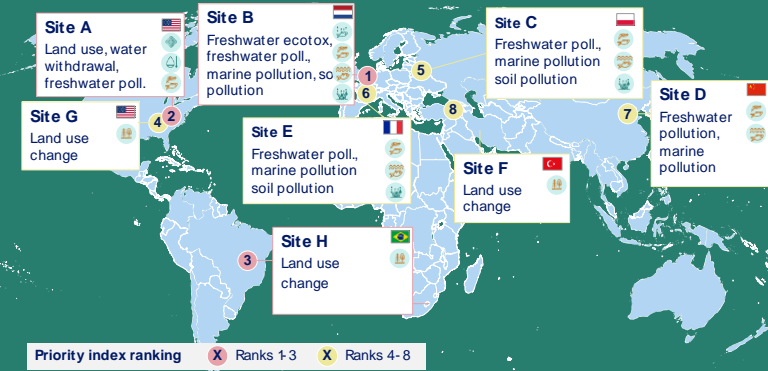


<sup>1</sup>Note: All values, including risks, costs to be addressed, and opportunities, are self-reported by 2,934 companies. Source: Carbon Disclosure Project (CDP), 2020 Water Analysis Report. <sup>2</sup>Note: Delaying action to halt and reverse biodiversity loss by 10 years is estimated to be twice as expensive as taking immediate action. Source: IPBES Transformative Change Report

## Understanding our pressures on Nature<sup>3</sup>



## Prioritizing our pressures on Nature<sup>2</sup>



<sup>3</sup>Note: based on preliminary analysis done for our operational sites, outcomes are anonymized. A similar analysis is currently done for our raw materials



# Our approach is enabling us to manage our risks, and drive real business value for dsm-firmenich and our customers



## Dairy Vitamin C

- The lowest carbon footprint VitC compared to the average alternative supplier\*
- 49% lower carbon footprint\*\*
- The only western source of VitC in the world
- Produced from EU wheat (non-GMO)
- Produced using pure water and clean air from Scotland within the natural environment

\* Life Cycle Assessment validated by third party in 2018

\*\*Related to the CO2 footprint



## New possibilities with cocoa powder partial replacement

Our solution allows partial cocoa powder reduction while preserving great taste at stable price:

- Up to 40% in bakery (biscuits & fat fillings)
- Up to 30% in dairy (UHT milk)

Produced with\*:

- 90% less carbon
- 97% less land use change
- 80% less water
- While addressing ethical cocoa challenges

\*The environmental footprint calculations are based on dsm-firmenich Internal DB & the EcoFood Compass® tool



## Haloscent® pure you

- Patented fragrance release technology ("profragrance") that amplifies olfactive experience
- First readily biodegradable profragrance in the fragrance industry specifically designed for performance in fine fragrance applications
- Renewable ingredients
- Naturally activated by the skin microbiome for a personalized scent

**We bring progress to life**