



Welcome to our webinar:

Ahlstrom's approach to creating customer value through Safe & Sustainable by Design solutions

We will start at

Session 1

9AM CET / 4PM CST
(CST: China Standard Time)

Session 2

4PM CET / 10AM ET
(ET: Eastern Time)



This session will be recorded

13 November 2025

Webinar agenda

1

Welcome

2

Empowering tomorrow's safe & sustainable products

3

Impact on sustainability

4

The Ahlstrom 2030 Safe & Sustainable by Design roadmap

5

Q&A panel



The team hosting you throughout today's session



Wouter Hut

EVP of Procurement
& Sustainability



**Johan
Lunabba**

VP of Sustainability
& Public Affairs



**Natasha
Chorlton**

Head of Product
Sustainability



Laura Laiho

Sustainability
Manager



Please ask your questions in the Q&A



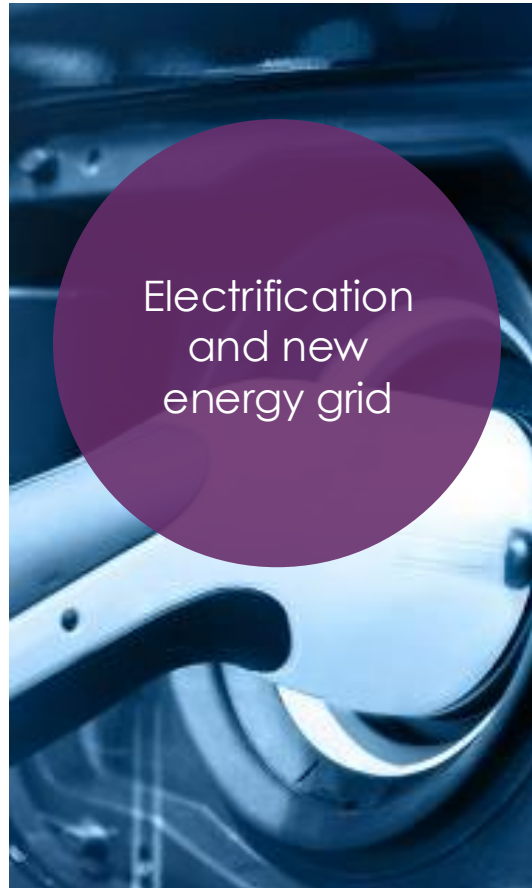
Empowering tomorrow's sustainable choices



Evolving in a changing market landscape



PLASTIC-FREE PRODUCTS



ELECTRIFICATION



CIRCULARITY



SAFE MATERIALS/REGULATION

A woman with long brown hair is running across a grassy field in a park. The sun is low in the sky, creating a strong lens flare and illuminating the scene. In the background, a dense city skyline with various skyscrapers is visible. The foreground is filled with out-of-focus green grass, creating a bokeh effect.

Safe and Sustainable by Design

Our approach to sustainability is focused on making our solutions Safe and Sustainable by Design.

We ensure our solutions are developed with minimal environmental impact, prioritizing safety, durability, and circularity.

Delivering on our commitments

Our achievements



EcoVadis
Platinum rating



CDP Leadership
score A-



Climate targets verified
by SBTi

-42% S1,S2
-25% S3



Commitment to UN
Global Compact



Collaboration
with WBCSD

Impact on sustainability



Measuring carbon emissions as a company

- Our emission reduction strategy is guided by the Science Based Target setting approach and commitment to limit the global warming in line with Paris agreement
- SBTi target setting is based on the latest climate science and when the science develops and evolves also the target setting methods change



GHG emissions reduction

-42%* Scope 1 & 2 by 2030

-22% S1 & S2 by 2024 vs 2021

-25%* Scope 3 by 2030**

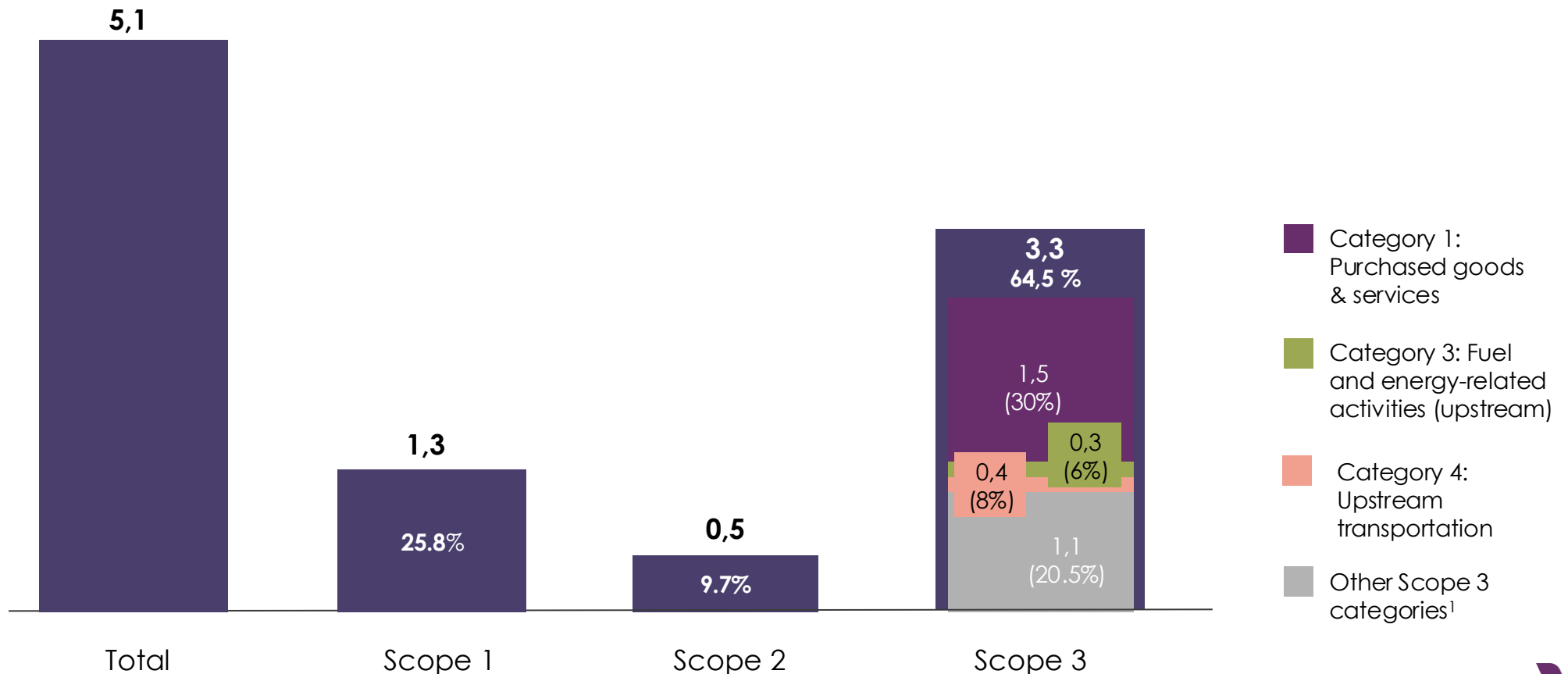
-16% S3 by 2024 vs 2021

- We measure our emissions following the Greenhouse Gas Protocol:
- **Scope 1** Direct emissions from our operations
- **Scope 2** Indirect emissions from purchased energy
- **Scope 3** Indirect emissions from our full value chain



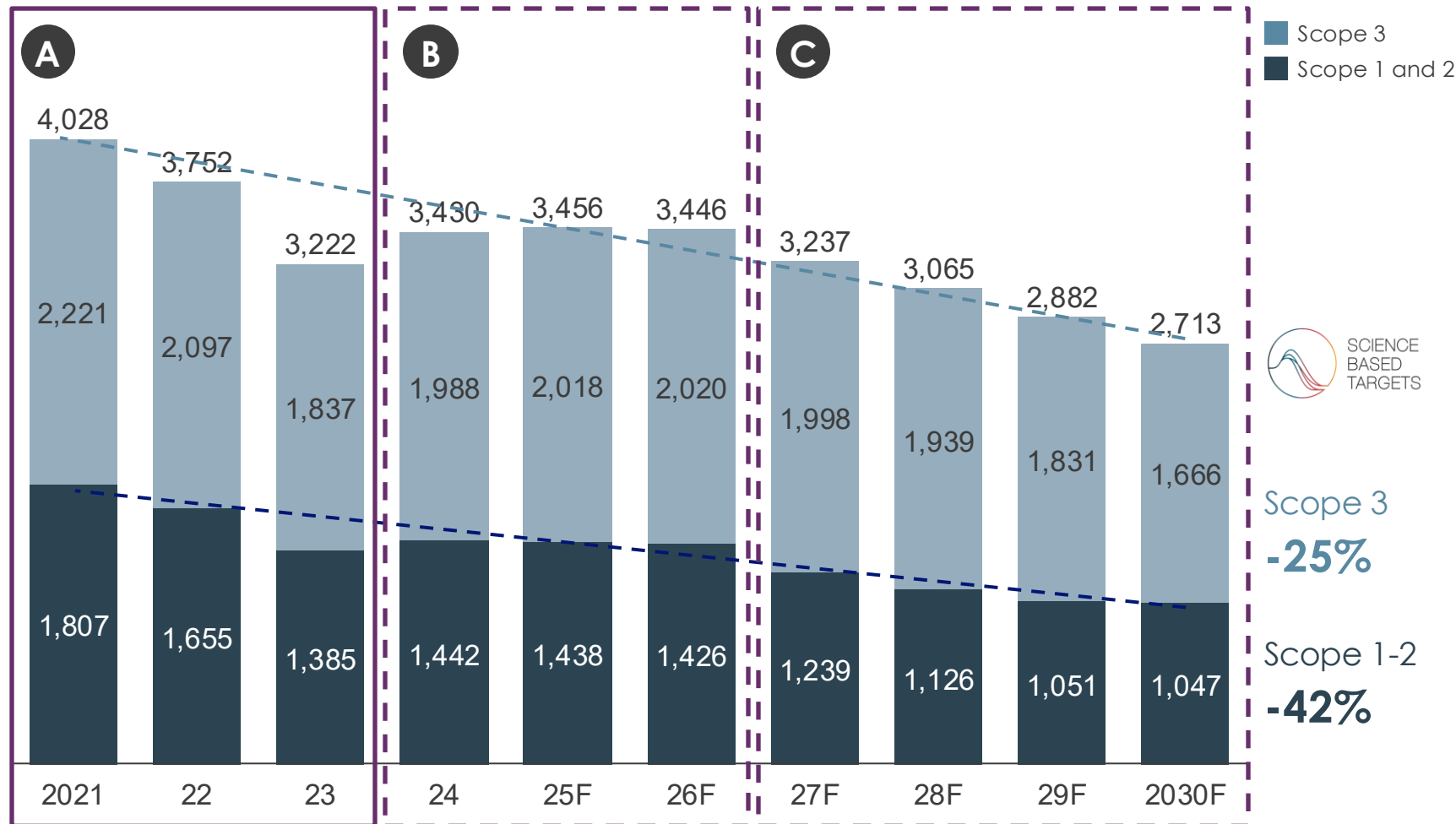
Our emission profile, Ahlstrom scope 3 emissions accounted for ~64.5% of total emissions

Scope 1, 2, and 3 Ahlstrom emissions breakdown, ktCO₂e, 2021



Ahstrom SBTi aligned emission reduction trajectory

Actual and forecasted Ahlstrom emissions, kt CO₂e per year



Key reduction activities across the three phases

- A**
 - Setting the baseline, committing to SBTi and building corresponding reduction plan
 - Investments in US sites on energy transition
- B**
 - Energy transition investments and improvements in energy efficiency
 - Reducing scope 2 through green energy procurement
 - Supplier engagement and innovation to drive down scope 3 emissions
- C**
 - Reduction through low carbon product portfolio, recipes and supplier decarbonisation
 - Continued energy transition and planning towards net zero 2050



Recent case example: Biomass energy conversion in Rottersac with significant impact on product carbon footprint



Key facts

- Preparations for implementation have started, with operations expected to commence in 2029.
- Once operational, the biomass installation will reduce carbon emissions by an estimated 34 kilotons annually, the equivalent of removing 21,250 passenger cars from the road.
- Will significantly reduce carbon footprint for products produced at Rottersac.

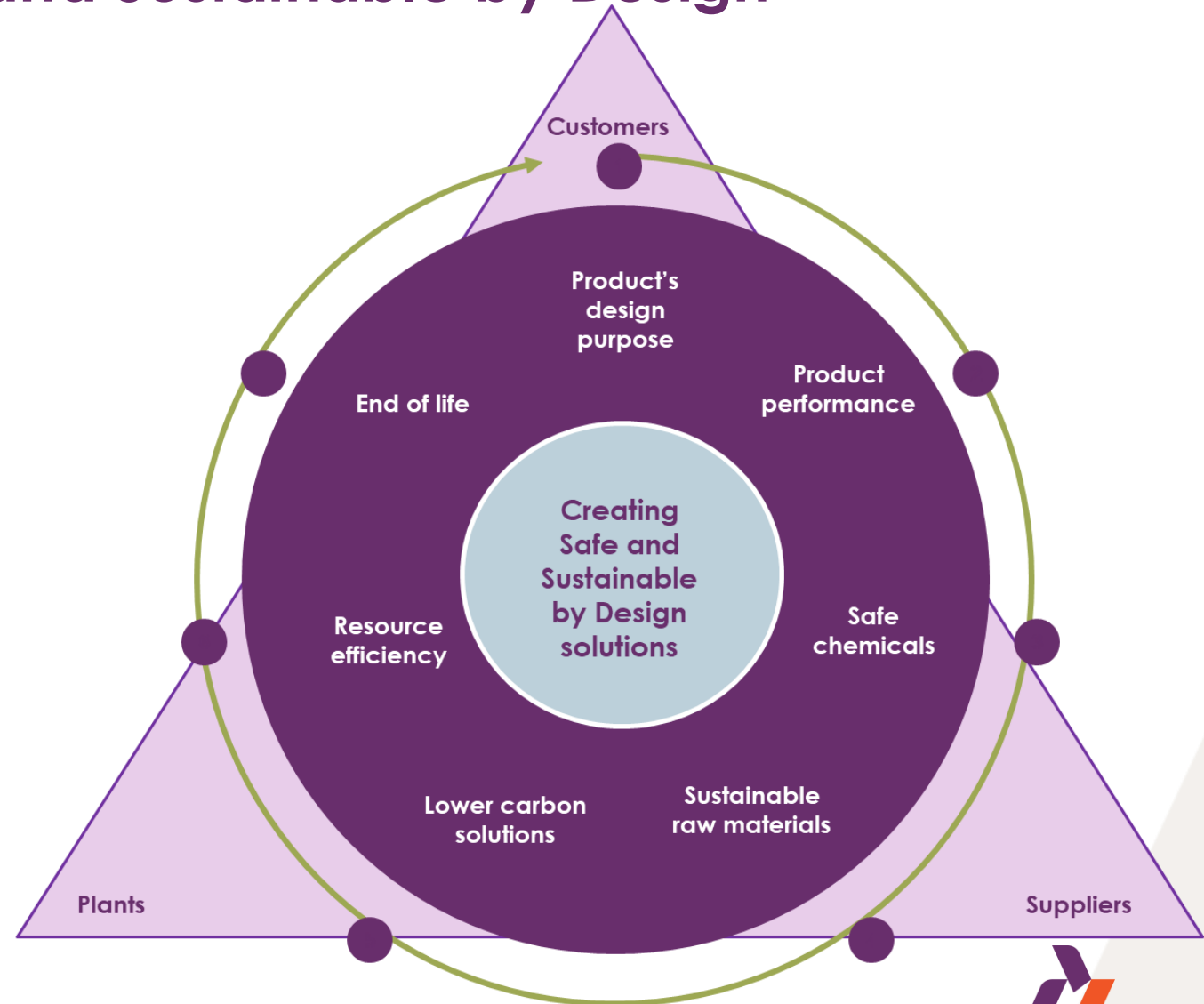
The Ahlstrom 2030 Safe & Sustainable by Design roadmap



Our approach to sustainability:

Value creation through Safe and Sustainable by Design*

- We take safety and sustainability into account at every stage of a product's lifecycle, from design through to disposal
- We look at the sustainability impact of our portfolio, whether this means circularity, product safety, emissions, water consumption, or any other aspect
- Each of these criterion is evaluated and given a score from 1 to 5. All products scoring above 3.5 are considered to be safe and sustainable by design
- Products scoring below are considered to be neutral or to have potential for improvement



*This concept is guided by the European Commission's framework for safe and sustainable design for chemicals and materials.



Our approach to more Safe and Sustainable products

MAIN LEVERS TO DRIVE IMPACT



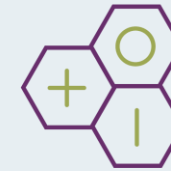
Improve existing products

- What raw material substitution options are feasible (spec and cost)
- Optimal supplier selection
- Value chain optimization



Innovate new SSbD products

- LCA analytics for impact verification and transparency
- New products designed using SSbD assessment to improve sustainability



New raw materials and technologies

- Leverage R&D capabilities
- Process innovation and new technologies



TIME TO DELIVER SOLUTION



Customer collaboration: Innovation Platforms at Ahlstrom

AMBITION



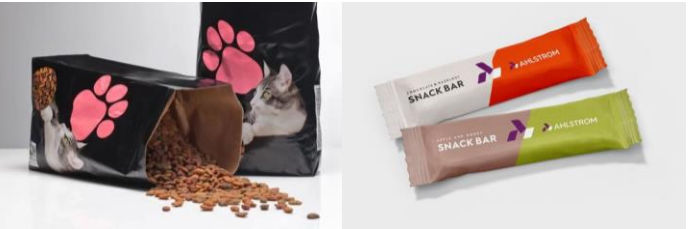
Expanding **paper-based food packaging to new application areas** by developing highly advanced barrier materials

Develop **fluoro-free** and **silicone-free** solutions for either high repellency (e.g., water and oil or grease) and release properties

Develop more **transparent paper solutions** and extend to non-food applications

SOLUTIONS

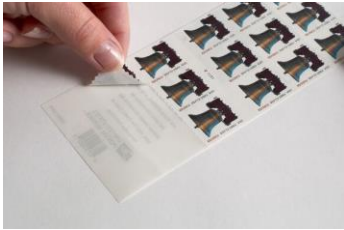
Food packaging



Filtration | Nonwoven | Medical devices
Release Liner | Food packaging



Food packaging | Technical material
Tape



Our commitment to our customers

Product performance

Our target ensures that we stay focused on delivering strong product stewardship

80% of sales from Safe and Sustainable by Design portfolio by 2030

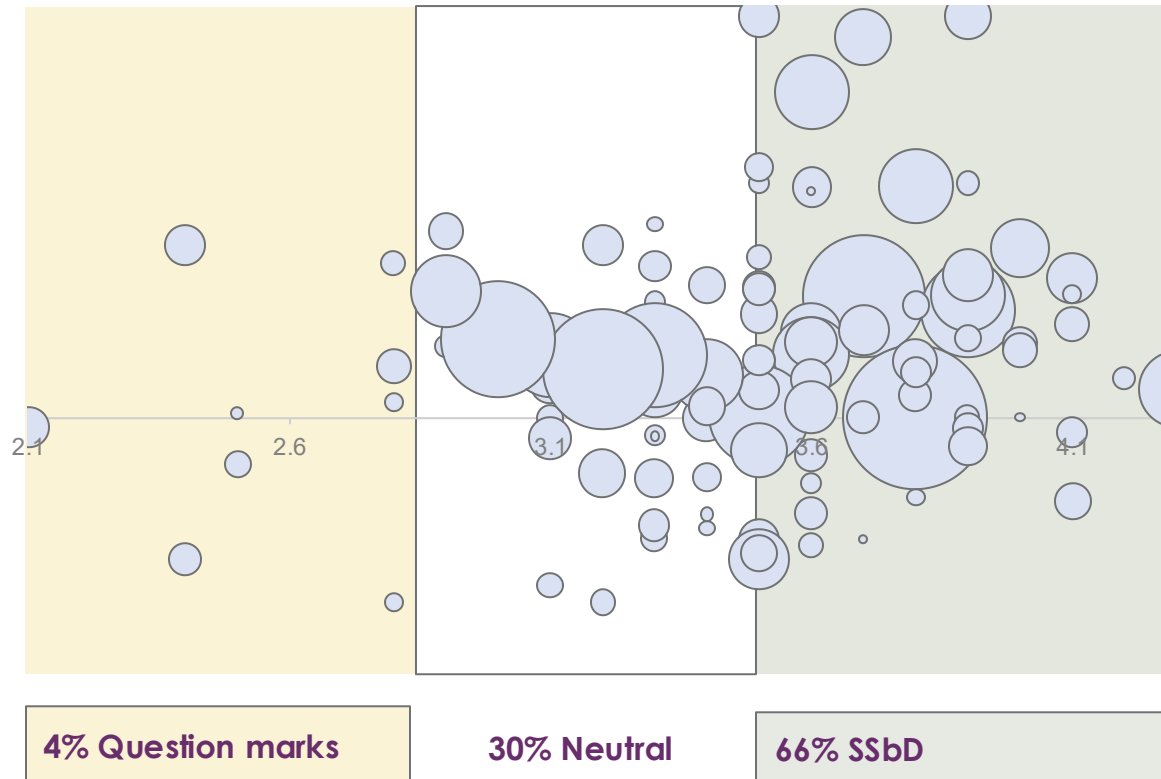
Share of sales from SSbD products			
Baseline 2021	2024	2025	2030*
45%	56%	66%	80%

Value creation

- **Gain competitive advantage and enhance brand appeal and** by strengthening the product value proposition
- **Create competitive business cases** by introducing cost-effective and compelling alternatives
- **Unleash innovation potential** by committing to creating Safe and Sustainable solutions



Product portfolio results enable targeted activities and focus



Examples of how we improve our portfolio

- Replacing chemicals with more sustainable and/or less harmful alternatives
- Improving our production process leading to improved footprint of products
- Substituting raw materials
- Working with customers to enable improvements in their converting
- Partnerships with suppliers

Graph mapping products according to their SSbD score, sales and growth



SSbD in practice

Circular lifetime

Fiber+ (K-cup filter)

Waste take-back scheme being introduced

Introducing closed loop recycled content into filter through recycling our customer's waste



RAW MATERIAL

END OF LIFE

Longer lifetime

Ahlstrom Optipad™

Hot cooking oil filter designed to deliver fast flow with good particle retention, maximizing filtration efficiency

Extending oil life by up to 75%



SUSTAINABILITY PERFORMANCE

Replacing plastic

MasterTape® Cristal

Transparent paper alternative to plastic tape

Recyclable according to EN13430 and CEPI - Recyclability Laboratory Test Method V2



SUSTAINABILITY TREND

END OF LIFE



Deep dive into criteria: End of life

Our approach to end-of-life

- Assess end of life (EoL) of both the intermediate product and final product
- Rate products according to if they are designed for a positive end of life, meaning technically recyclable, home or industrially compostable and if they have access to infrastructure

Substantiations for positive end of life

	Recyclable	Recyclable in paper mills with conventional process according to CEPI protocol (V3; 02/2025-Part I) and 4evergreen assessment (V2; 01/2025)
EU	Compostable Industrial (TUV)	Industrial compostable according to EN 13432 requirements, certified TUV OK Compost
	Compostable Industrial & Home (TUV)	Industrial and Home compostable - Certified TUV OK Compost and OK Compost Home
	Recyclable	Certified recyclable by WMU
US	Suitable for recyclability	Suitable for recyclability - Certified repulpable by WMU (Part I)
	Compostable Ind (BPI)	Certified BPI Compostable
AUS/ NZ	Compostable Home (ABA)	ABA Home Compostable certified

Replacing plastic

Lamibak™ Flex - base paper designed for flexible fibre-based packaging

Recyclable according to EN13430 and CEPI - Recyclability Laboratory Test Method V2

Industrially compostable (US BPI certified)



RAW MATERIAL

END OF LIFE



The Ahlstrom 2030 Safe & Sustainable by Design roadmap

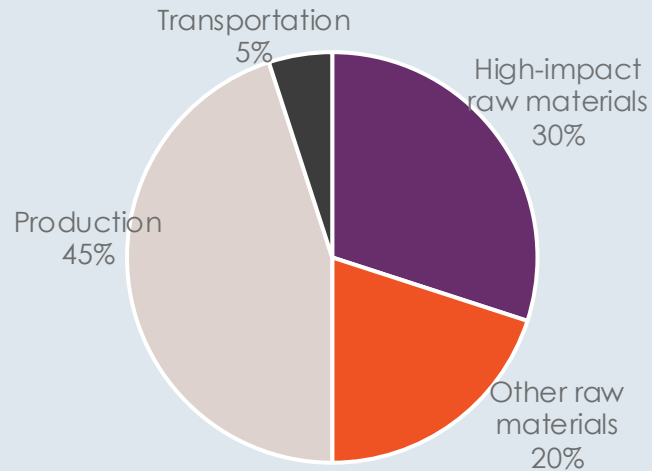
DEEP DIVE: EMISSIONS IMPACT



Deep dive into criteria: Emissions impact

Current approach

- High-impact raw materials
- Plant scope 1&2 intensity



Example of a generic product carbon footprint showing the impacts of production and raw material choices

Future approach

- Life Cycle Assessment automation platform currently being implemented
 - SSbD method to be updated to include product-level assessment
 - Supplier emission factors included for more accurate results
 - Potential to include other LCA impact categories
- Eco-design within the platform to support and enable design for more sustainable products that will meet SSbD requirements



The Ahlstrom 2030 Safe & Sustainable by Design roadmap

NAVIGATING THE LEGISLATIVE OUTLOOK FOR PRODUCTS



Futureproof products in light of legislative developments

PACKAGING	Packaging & Packaging Waste Regulation (PPWR) • Meet design for recycling requirements • No intentionally added PFAS	Extended Producer Responsibility (EPR) Harmonisation in EU (PPWR) 7 U.S. states have passed packaging bills: California, Colorado, Maine, Oregon, Minnesota, Washington and Maryland (New Jersey ongoing)
RAW MATERIALS	EU Deforestation Regulation (EUDR) Traceability of wood throughout the value chain for deforestation free materials	Chemicals • Chemicals industry action plan • REACH revision • Proposed PFAS bans • Substances of concern in Packaging (PPWR)
CIRCULAR PRODUCTS	Circular Economy Act & Bioeconomy Strategy Capturing the value of biobased materials Enabling use of secondary materials	Ecodesign for Sustainable Products Regulation (ESPR) Ecodesign requirements for all products in EU Digital product passports



Q&A Panel





Let's stay in touch!

For comments, questions and ideas for
collaboration,
please contact us at

sustainability@ahlstrom.com

Follow our sustainability journey on LinkedIn

[@ahlstrom](#)