

DSM Protective Materials

Purpose led,
Performance driven

Introduction of CirculariTeam®

Jac Spijkers
Eurocord and CI Joint Meeting
June 13, 2022



Our Motivations

Drivers to establish industry coalition

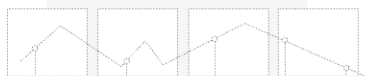
- “Linear economy” is not sustainable: we (human race) are currently consuming on yearly basis **1.7 times** the amount of resources that the earth can replenish.
- Responsibility needed from design through end of life.
- Transitioning away from fossil feedstock is necessary to have a major impact on carbon/environmental footprint.
- Increasing pressure from legislators:
 - EPR Schemes (circular design for fishing gear, NEN, etc.)
 - Green Deal Framework in Europe
 - 14th China 5-Year Plan
 - Revival in USA
- We cannot do it alone.



The Summit

How to Collaborate?

1. From fiber to product Journeys



2. Challenges



3. Focus themes



4. Envision the future



5. Set it up



6. Share our milestones



DSM Protective Materials
**CIRCULARITY
SUMMIT**

Coalition Launched!

CirculariTeam®

Goal: Close the loop on Dyneema®, the world's strongest yarn™

Three pillars: Cordage - Ballistics - Textiles

Focus Themes:

- Reduce/Reuse
- Reverse Logistics, sorting, separating
- Solutions for Recycling
- Design for circularity
- Information Sharing



Milestones Set

- Evaluate non-wovens from post-consumer HMPE rope waste by third party

- Establish end of use rope and net collection point(s) at port(s)
- Defined best practice for rope cover removal
- Education provided to market on recycling possibilities and attention points

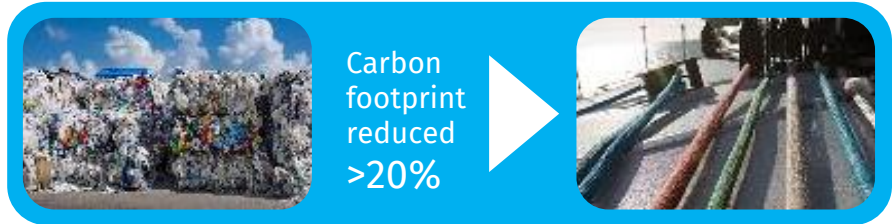
- Chemical recycling demonstrated for post-consumer HMPE rope and net waste
- Defined location(s) to send and store post-consumer HMPE waste



CirculariTeam® Coalition

Recycled-based Dyneema®

- Delivered first ever HMPE fiber from recycled mixed plastic waste (mass balance approach)



The Approach

From Design Until End-of-Life

- Sustainable outlet(s) for production waste
- Sustainable outlet(s) for end-of-life waste
- Source of circular feedstock
- Design for Circularity

