



# Retail

# Reimagined

7-8 & 14-15 June

The future  
of retail is  
sustainable.

What does  
it take to  
get there?

# Agenda

## June 14

### **The Sustainability Revolution**

Get an overview of the key trends in sustainable packaging and future market predictions. Moreover, learn about brand owners' packaging needs and discover the four elements of environmentally-friendly packaging to help you make your products sustainable.

## June 15

### **The New Transparency**

Discuss eco-education and who should lead the way, learn about carbon footprints and labels, and investigate digital labels and traceability in an era of e-commerce.

# Agenda

- 14.00–14.05** Getting ready for the two days ahead
- 14.05–14.50** Panel discussion: Sustainability as standard: Discover the latest in sustainability trends
- 14.50–15.20** The four elements of sustainable packaging – how to achieve sustainability in your product
- 15.20–15.40** The future of labels: An introduction to RFID and sustainable materials (Atma.io) & Carbon footprint
- 15.40–15.45** Close of the day



# Panel discussion: Sustainability as standard: Discover the latest in sustainability trends

# Our speakers



**Tim Sykes**  
Brand Director  
Packaging Europe



**Juliette Guerin**  
Packaging & Recycling Expert  
CIRCPACK



**Drew Smith**  
CEO  
Smith Lumen



**Niels Schou**  
Director Marketing Excellence  
EMENA  
Avery Dennison

# Agenda

- Sustainability – why should you care? The key global trends in sustainable packaging and market predictions for the future
- Understand the benefits sustainability brings to your business and how to sell it as an advantage point for your customers
- The key sustainable solutions that will help your clients meet consumer demand such as enhanced transparency, recyclability and circularity



# The four elements of sustainable packaging – how to achieve sustainability in your product

# Agenda

- The 4 Rs
- Design for Recycling
- Reduce
- Enabling Recycling
- Recycled/Renewable Content & Responsibly Sourced



**Vladimir Tyulpin**  
Marketing Manager  
Premium Labels  
Avery Dennison



**Rob Groen in 't Wout**  
Marketing Director  
Paper and Film  
Avery Dennison



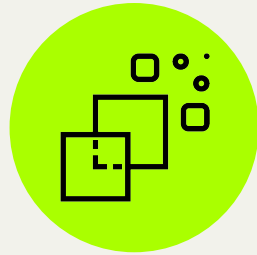


# Material innovation centered around the 4 sustainability pillars



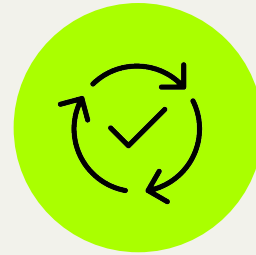
**Reduction in the use of materials**

AD RDX™



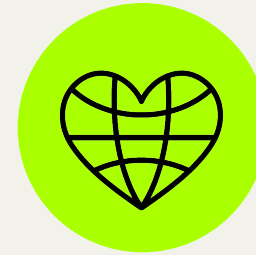
**Enables reuse, recycling or compostability**

CleanFlake  
HDPE Recycling



**Contains recycled or renewable content**






rMC  
rPE  
rCrush  
rPP  
rDT



**Responsibly sourced**

PP bio-based ISCC  
PE bio-based ISCC  
  
FSC® certified paper

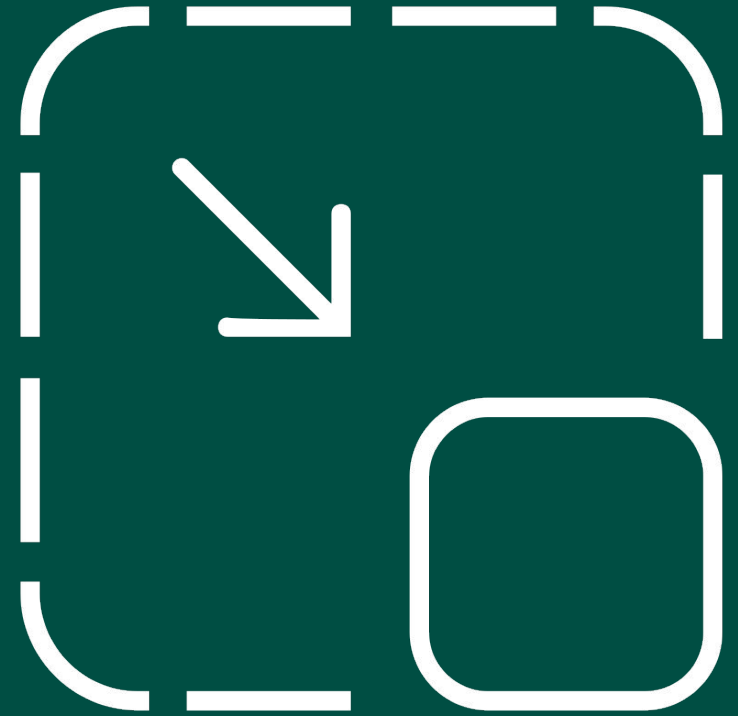
# Design for Recycling

Packaging Substrates	 <b>PET</b>	 <b>HDPE</b>	 <b>PP</b>	 <b>Glass</b>	 <b>Cardboard</b>
Key End-Use Segments	<ul style="list-style-type: none"> <li>• Beverage</li> <li>• Food</li> <li>• HPC</li> </ul>	<ul style="list-style-type: none"> <li>• Beverage</li> <li>• Food</li> <li>• HPC</li> </ul>	<ul style="list-style-type: none"> <li>• Dairy</li> <li>• HPC (minor)</li> </ul>	<ul style="list-style-type: none"> <li>• Beverage</li> <li>• Food</li> </ul>	<ul style="list-style-type: none"> <li>• Transport</li> <li>• Logistics</li> <li>• Ecommerce</li> </ul>
Label Types & Technologies	<ul style="list-style-type: none"> <li>• PP (Wrap around)</li> <li>• PP, Paper (PSL)</li> <li>• Sleeves</li> </ul>	<ul style="list-style-type: none"> <li>• PE, GMDO, (PSL)</li> <li>• Sleeves</li> <li>• Paper (Wet glue)</li> </ul>	<ul style="list-style-type: none"> <li>• PP (PSL)</li> <li>• Paper (Wet glue)</li> <li>• Direct Print</li> </ul>	<ul style="list-style-type: none"> <li>• Paper, PP (PSL)</li> <li>• Paper (Wet glue)</li> </ul>	<ul style="list-style-type: none"> <li>• Paper DT/TT (PSL)</li> </ul>
AD Solutions (enabling recycling)	<ul style="list-style-type: none"> <li>• AD CleanFlake™ (EPBP approval)</li> </ul>	<ul style="list-style-type: none"> <li>• (r)PE, GMDO (RecyClass approval)</li> </ul>	<ul style="list-style-type: none"> <li>• (r)PP</li> </ul>	<ul style="list-style-type: none"> <li>• AD CleanClass™ (wash-off)</li> </ul>	<ul style="list-style-type: none"> <li>• Paper / VI labels</li> <li>• rDT, rMC</li> </ul>

How our Sustainable  
ADvantage portfolio  
helps you to address  
your challenges and  
opportunities



# Reduction in the use of materials



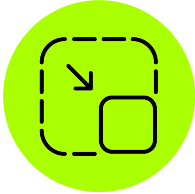
# AD RDX Portfolio

...less is more





# With AD RDX™, less is more...



AD RDX's offers high-performing paper and film products that significantly **reduce** the usage of **natural resources** — that means less oil, water, trees, energy and CO<sub>2</sub> emissions.



# 10%

## Paper

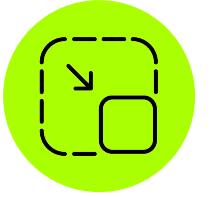
Reductions of at least 10% can be expected for CO<sub>2</sub> emissions and also for tree and water usage.



# 20%

## Film

Reductions of at least 20% can be expected for CO<sub>2</sub> emissions and also for oil and water usage.



## AD RDX reduces

**Carbon footprint**

**Downtime/changeovers**

**Storage space/costs**

**Transportation costs**

**Disposal costs  
(less waste)**

**Packaging tax**

## AD RDX increases

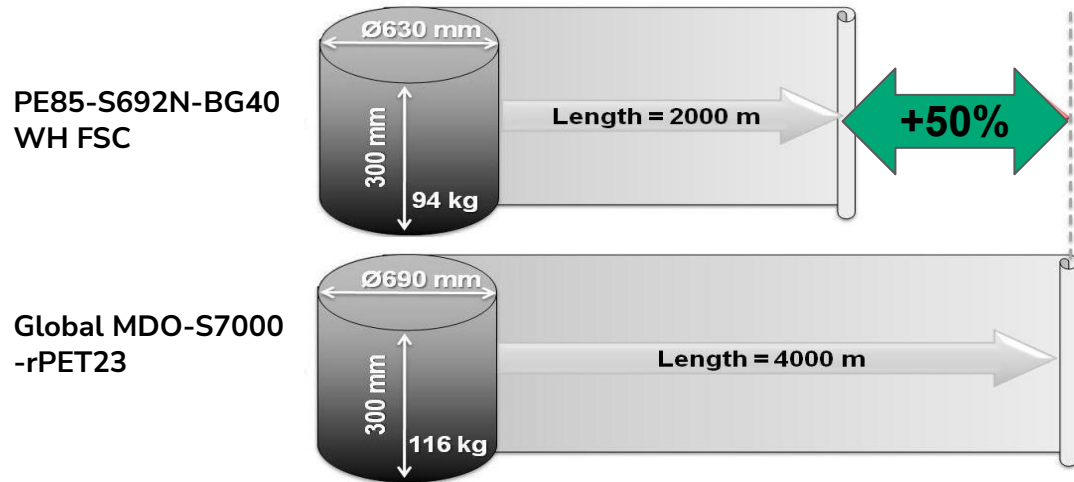
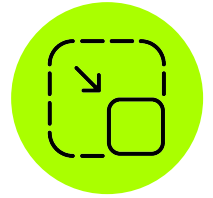
**Sustainability footprint**

**Operation efficiency  
(more labels per roll)**

**Productivity  
(less rolls changeovers)**

**Positive impact on  
the environment**

# Global MDO - Productivity & Sustainability gains



- **Fewer changeovers** on press enabled by material reduction (caliper)
- **Twice more labels** for only 10% of diameter increase
- Benefits across all of the **key sustainability credentials** – Including rPET liner with 30% recycled content



Water  
**82% less**  
(10,800,600) liters



Energy  
**39% less**  
(2,140,900) MJ

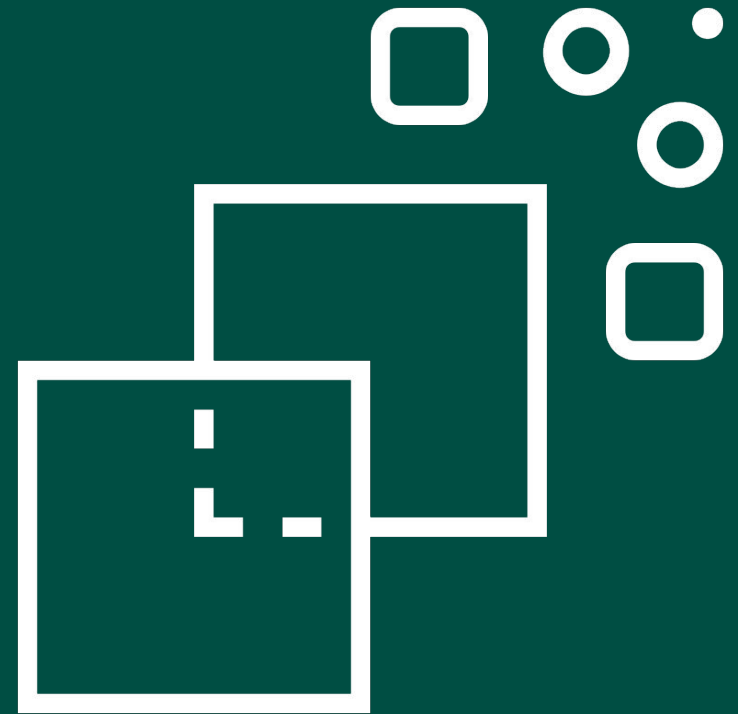


Greenhouse Gas  
**74% less**  
(558)Tonnes CO<sub>2</sub>

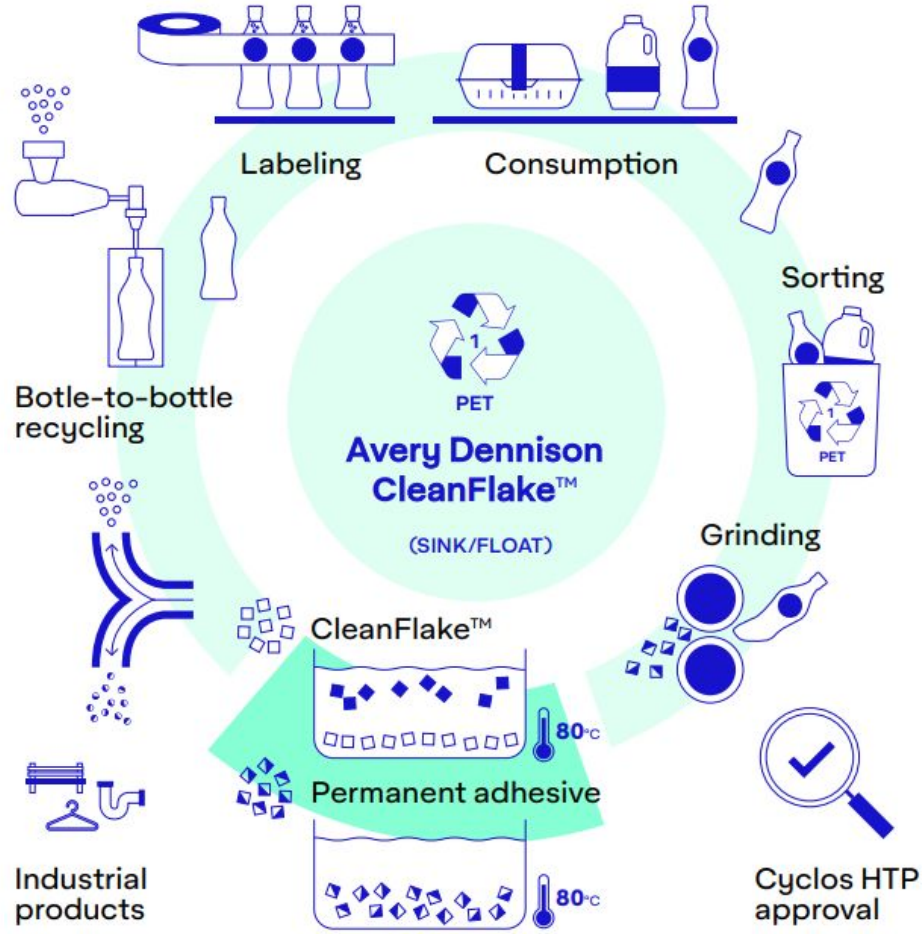
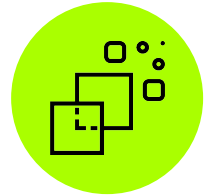
*\*Avery Dennison internal tool is based on a life cycle assessment (LCA), using 1,000,000 square meters of our GMDO in place of conventional PE.*



# Enabling Recycling



# CleanFlake SR3011N

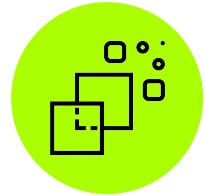


- Solution enabling recycling of PET packages (bottles, trays, clamshells, jars) in Food, Beverage, HPC
- Certified by EPBP and Institut Cyclos-HTP for PET recycling
- Enabling recycling with improved application performance:
  - Adhesion, clarity on par with S7000
  - Low and high speed filling lines
- Approved for direct food contact
- **TC7007**: best in class printability



# Labels Compatible with HDPE Recycling

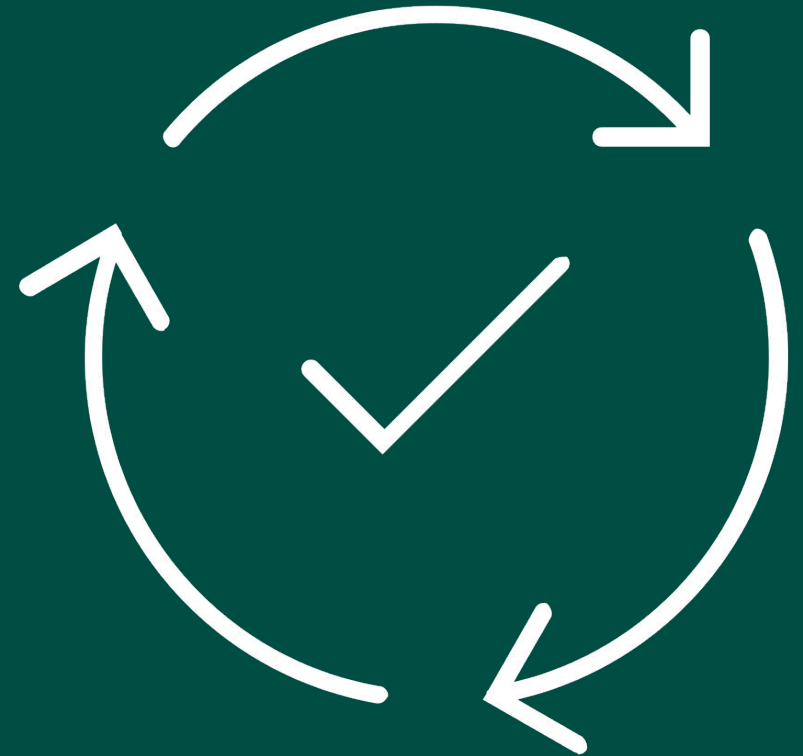
## HDPE Coloured Rigid Packaging



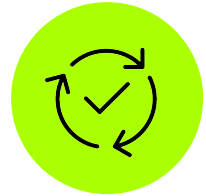
- **Recylass** is a value chain platform with objective to drive the harmonization of the methodology and **guidelines across the EU in terms of recyclability and the recycled content evaluation.**
- Coloured HDPE Stream challenge: up to 40°C wash
- Avery Dennison's **Global MDO, PE and PP** labels, which feature a permanent acrylic adhesive and remain in place during a cold wash are approved by RecyClass for coloured (pigmented) HDPE recycling.



**Recycled/  
Renewable  
Content &  
Responsibly  
Sourced**



# Recycled or bio-circular content



## Mechanical Recycling

rMC  
rPE  
rCrush  
rPP  
rDT



## Chemical Recycling

rPP ISCC  
rPE ISCC

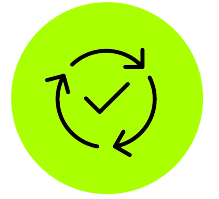


## Bio-circular Content

PP bio-based ISCC  
PE bio-based ISCC



# Contains recycled content rRange of Filmic products



**Totally new. Totally recycled.**  
100% recycled rPE Top White



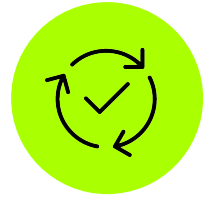
**rPP Post-Consumer ISCC-certified**  
rPP Clear & Cavit up to 99% ISCC



**rPP Mechanically Recycled**  
30% post-industrial recycled



# Contains recycled content rRange in general Paper products



## rMC FSC

30% as well as a 100% recycled content



## rDT ECO FSC

First to market : Direct Thermal Eco with 15% recycled content

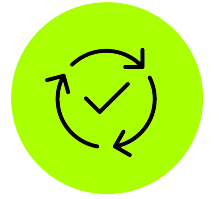


## Product Characteristics

- Products appearance equal to standard products
- Made with PCR
- Product can be converted and printed like standard none-recycled products
- Reduction on trees, water and energy used and a lower carbon footprint

# Contains recycled content

## Sustainable decorative labelling solutions



### 100% Recycled uncoated papers

Supporting wineries to build sustainable brand imagery



### rCrush label range

Label materials using organic residue in the label



### Product Characteristics

- Series of special decorative papers made from PCR (up to 100%)
- Papers made from natural waste streams in combination with PCR
- Supports designers and end-users building their sustainability image



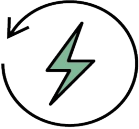
# Biobased Films: PP and PE



- Up to 85% biocircular oil\* content: ISCC-certified material as a Certified biocircular polymer (mass balance approach)
  - Reduces usage of fossil fuels
- Food Approved: **direct food contact**
- ISCC certified: Mass balance to certify the sustainably sourced content
  - Requires full value chain incl. converter certification
- Available in white cavitated; clear and solid white optional



  
 fossil material  
 barrels of oil-e  
**85% less**

  
 energy  
 kWh  
**85% less**

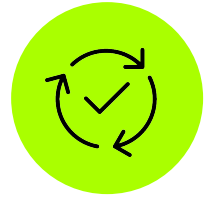
  
 greenhouse gas  
 tonnes CO<sub>2</sub>-e  
**9% less**

  
 water  
 gallons  
**2x more**

**PE biobased  
 ISCC+ certified  
 coming soon!**

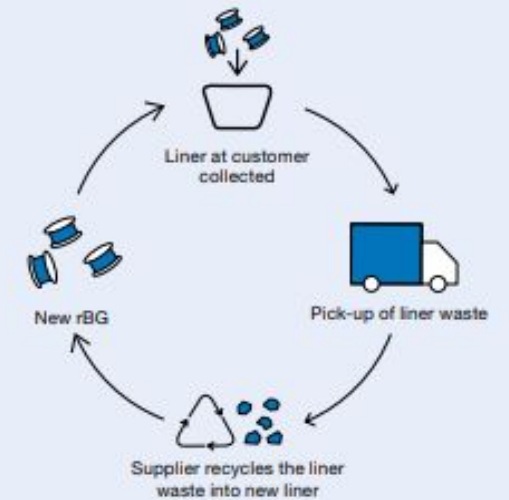
PP60 BIO CAV TOP WHITE vs. PP60 CAVIT TOP WHITE

# Contains recycled content rRange of liners



- PET as well as Glassine Liners with recycled content
- Used in Film and Paper products
- A step towards a Circular Economy

**Example of circular economy using rBG**



# Q&A

# The future of labels: An introduction to RFID and sustainable materials (Atma.io) & Carbon footprint

# Agenda

- An introductory session into Avery Dennison's RFID and sustainable materials solutions
- Live demo of atma.io
- Explore the different use cases for each and understand what benefits these solutions bring to a client's business



**Rob Pick**  
MDM EMEA, Connected Products  
Avery Dennison

Retail Reimagined seminars - June 2022

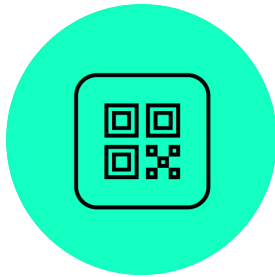


## Our progressive family

We describe our digital ID technologies as a progressive family; flexible, adaptive, ever expanding.



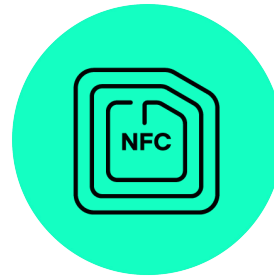
Barcode



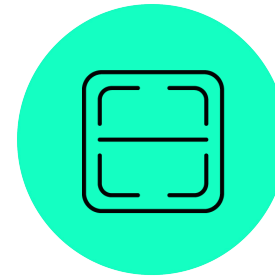
QR code



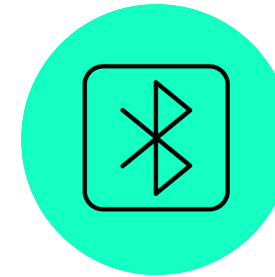
UHF / RAIN  
RFID



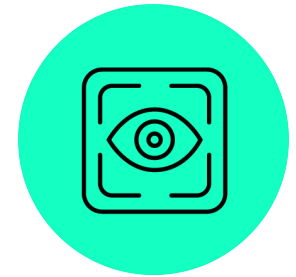
NFC / HF



Printed  
electronics



Passive  
bluetooth



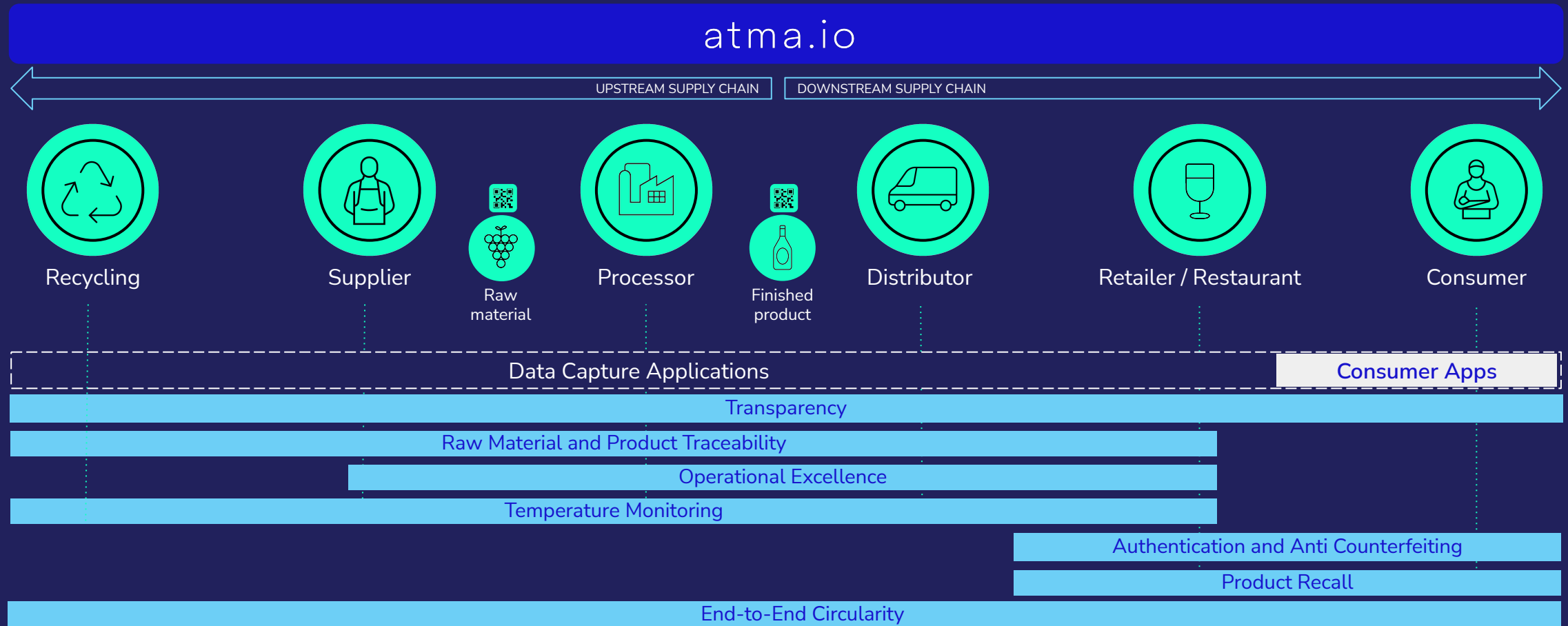
Sensors

atma.io

And with the introduction of atma.io, connected product cloud by Avery Dennison, the pairing of every physical item from our digital ID technologies with a unique digital ID is the key to creating a connected product and a connected consumer.

# atma.io Drives Item-Level Use Cases Throughout the Supply Chain

API integration with existing systems: Sourcing, material management, ERP, OMS, CRM, POS, WMS, SCM...



# atma.io is the world's leading connected product cloud

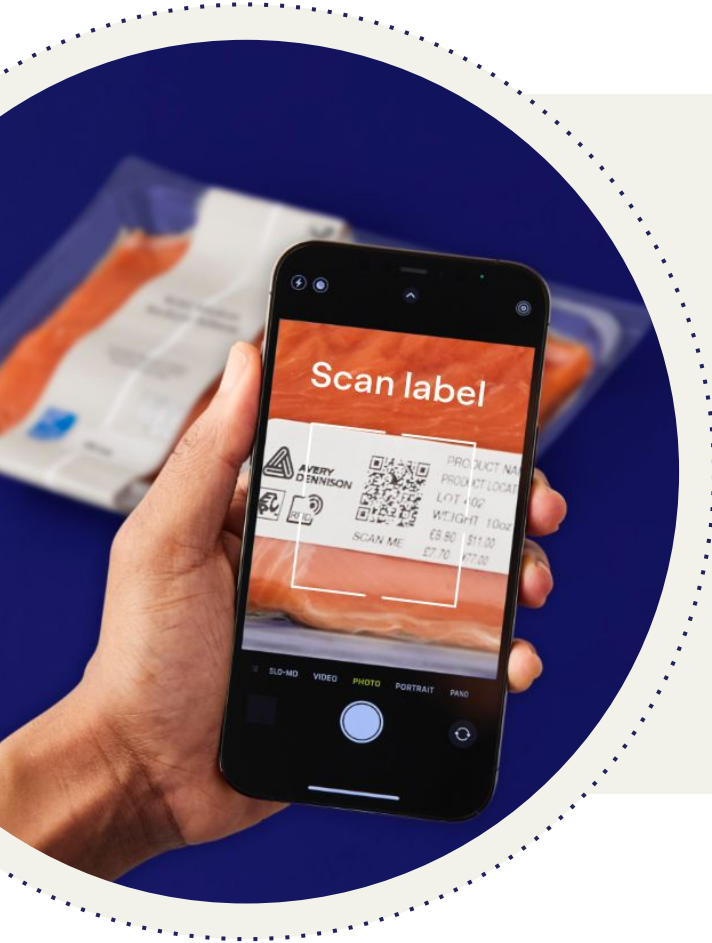
an easy-to-integrate **platform** to create, manage, and assign **unique digital IDs** for everyday items

an **ecosystem of applications** that unlock the end-to-end value of **connected products**

a **single source of truth** for brands, supply chains, and consumers



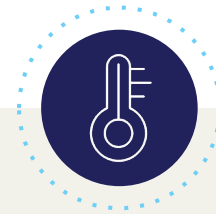
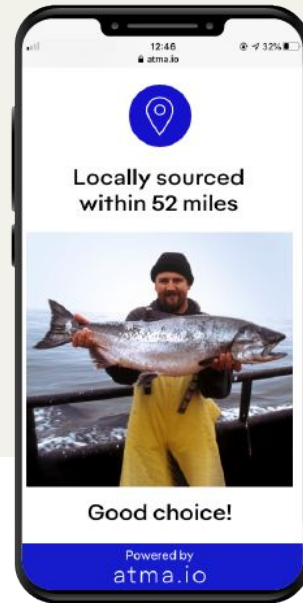
# What would your food tell you?



**Ethically certified**



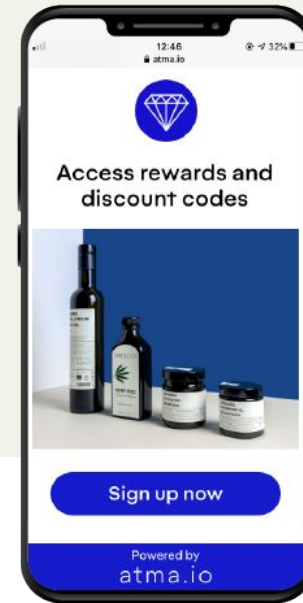
**Product journey**



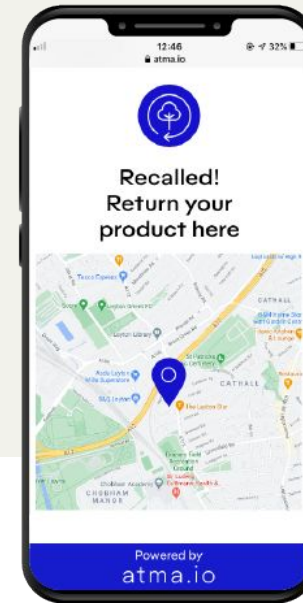
**Freshness checks**



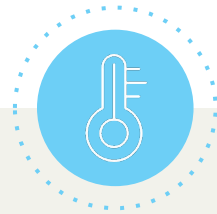
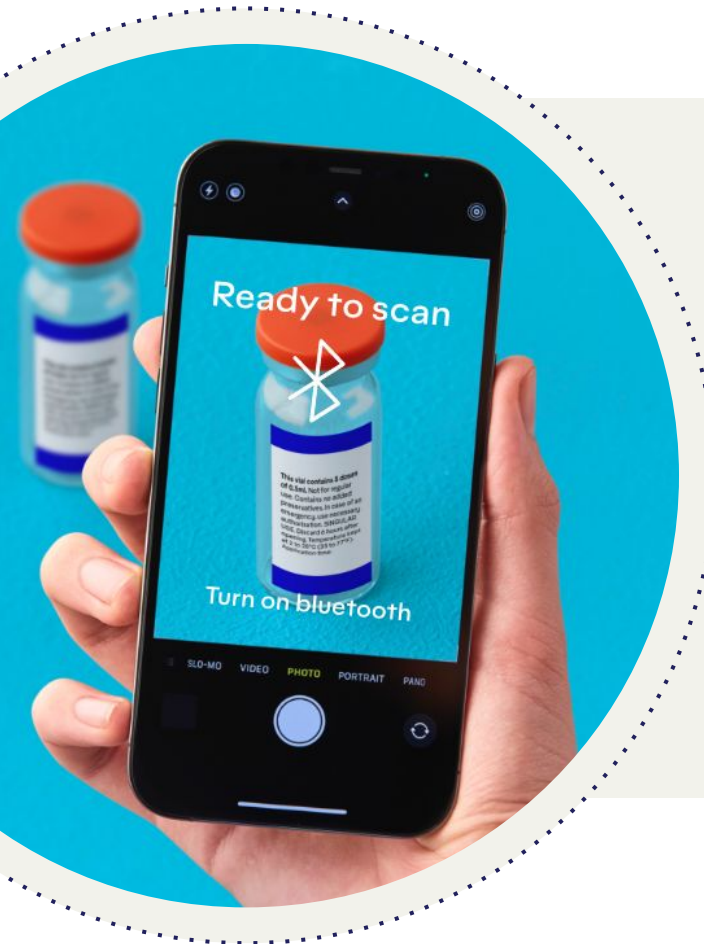
**Customer rewards**



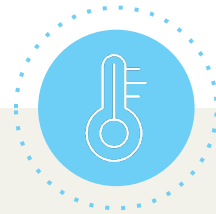
**Recall and return**



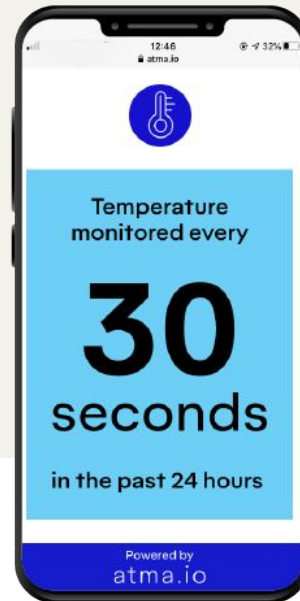
# What would your medicine tell you?



**Real-time temperature**



**Temperature monitoring**



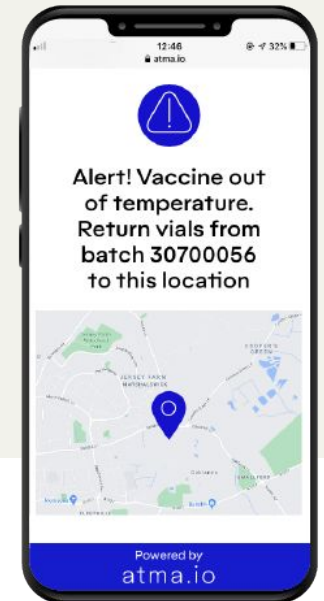
**Product authentication**



**Compliance certificates**



**Safety alerts**



atma.io Spring '22 release

## New sustainability features

Launching groundbreaking new sustainability features, including 'Carbon impact analytics' and 'Waste elimination tool', which will help transform how brands **meet net-zero targets and reduce waste** across the supply chain.

[Find out more.](#)

“We live in an ever-changing, data-driven world where constant access to timely, accurate insights is key to driving productivity and sustainability goals. The atma.io Spring '22 release will empower businesses to get meaningful insights from data that has often been in silos, allowing them to make informed decisions in real-time that can dramatically transform their business agility and accelerate their performance across the bottom line, people, planet and profit.”

MAX WINOGRAD  
VP, CONNECTED PRODUCTS, AVERY DENNISON SMARTRAC

[Watch short video about real-time carbon impact analytics](#)



[Watch short video about real-time waste elimination](#)



# Q&A + Closing

# Thank you

