

#### CIRCULAR INNOVATION IN THE HIGH TECH SUPPLY CHAINS

## SHIFT FROM DISPOSABLE CARDBOARD BOXES TO REUSABLE BINS







SUCCESS STORY #04



## THE PROBLEM OF THE INEFFICIENT & DISPOSABLE PACKAGING

#### What is VHE solving?

The current shipping model creates a large-scale disposal of cardboard boxes and unnecessary work in the supply chain. They require folding, sealing, extra labelling, and unpacking.



Cartons must be purchased regularly for one-time use.

VHE PACKS & SHIPS



steps such as folding, sealing, and extra labelling boxes.

#### CUSTOMERS UNPACK



Large numbers of cardboard boxes are used every week, and inefficient steps follow; unpacking items and placing them in the bin.



#### DISPOSE

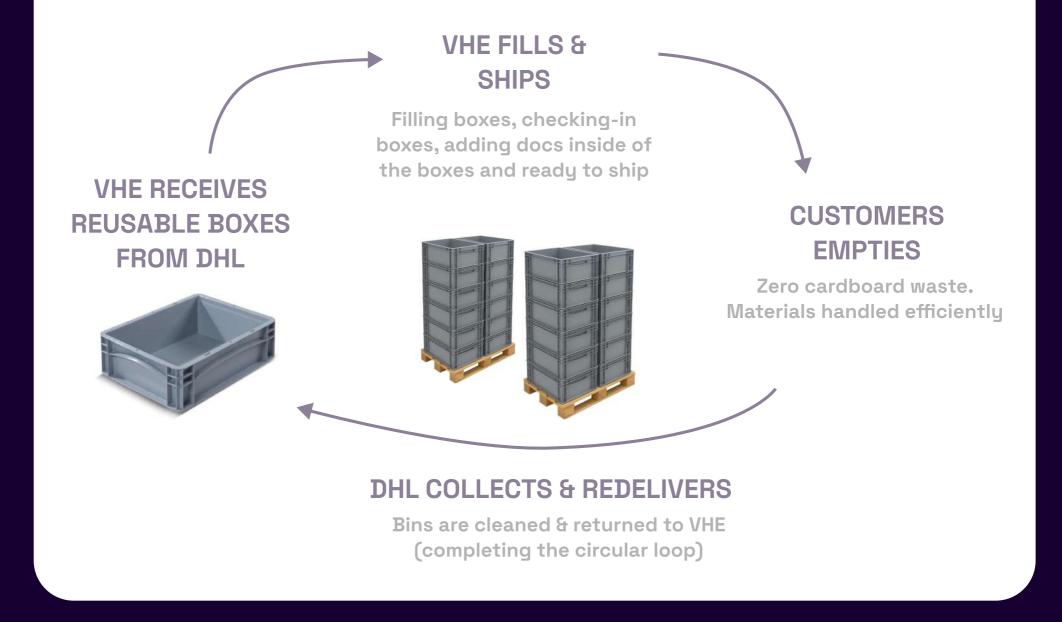
Used carboard boxes are thrown away, adding cost and landfill waste.



## REUSABLE BINS REPLACING DISPOSABLE BOXES

#### How is VHE solving?

Together with DHL, VHE replaced cardboard boxes with reusable boxes in the weekly supply flow. This reusable system, improves cycle time, cuts waste, and create a more efficient supply chain.





# A CIRCULAR PACKAGING SOLUTION BY VHE & DHL: DRIVING CIRCULARITY & EFFICIENCY IN SUPPLY CHAIN

What is the impact?

The pilot proved that reusable bins are not only sustainable but also efficient:

- Eliminated the use of ~510 cardboard boxes.
- Reduced landfill waste (~ 70kg yearly) &
   CO2 (~ 90kg yearly).
- Improved cycle time (~ 1.5 min/per box).
- Created a closed-loop flow ready for scale-up across suppliers.





## IMPORTANT STEPS IN CREATING SUCCESSFUL CIRCULAR INNOVATION

What have VHE, DHL & customer collectively done to drive circular innovation?

- √ Rethought disposable packaging flows.
- √ Joint collaboration to create value for all parties.
- ✓ Tested, learned, & improved pilot runs to prove the concept.
- √ Data-driven decision to measure impact.









# "IF YOU ARE MOTIVATED TO GET STARTED WITH CIRCULARITY, THE CIRCULAR INNOVATION PROGRAM HELPS YOU THINK IN THE RIGHT WAY AND CONNECT WITH THE RIGHT PEOPLE TO ACHIEVE REAL RESULTS."

**BENNY CARELS - VHE - COMMERCIAL MANAGER** 

This chain project is powered by CIP. The program is organised and facilitated by ImpactX as an independent chain orchestrator for circular transition in the high tech sector.



"THE CIRCULAR INNOVATION
PROGRAM HAS BEEN GREAT IN
BRINGING TOGETHER THE RIGHT
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THROUGH CROSS-COMPANY
COLLABORATION, WE WERE
ABALE TO GO BEYOND THE PILOT
AND PRESENT AN IMPLEMENTED
SOLUTION ALREADY! "

PEPIJN WESTER - DHL SUPPLY CHAIN- OPERATION MANAGER

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# INNOVATION THRIVES ON COLLABORATION— WHAT COULD THIS APPROACH DO FOR YOUR VALUE CHAIN?

What ideas do you have for circular innovation, but you're unsure how to get started?

#### LET'S EXPLORE THE OPPORTUNITIES TOGETHER!



ON A MISSION TO DRIVE CIRCULAR BUSINESS IN THE HIGH-TECH SECTOR TOWARDS AN INDUSTRIAL SCALE impactx.nl

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