CVC FAST FORWARD

Remanufacturing the future

CVC FF 2025-2028

Provincie Noord-Brabant

IMPACT X

K PLUS V

circular value center

MISSION OF CVC FAST FORWARD

Supports entrepreneurs in the manufacturing industry that aim to **practically accelerate circular business growth**.
The province of Noord-Brabant strives towards a circular transition in its economy. The circular economy will contribute to a 50% reduction of resource utilization by 2030.

THE CVC COMMUNITY

Follow this mission, the CVC community supports organizations in the regional manufacturing industry towards circularity.

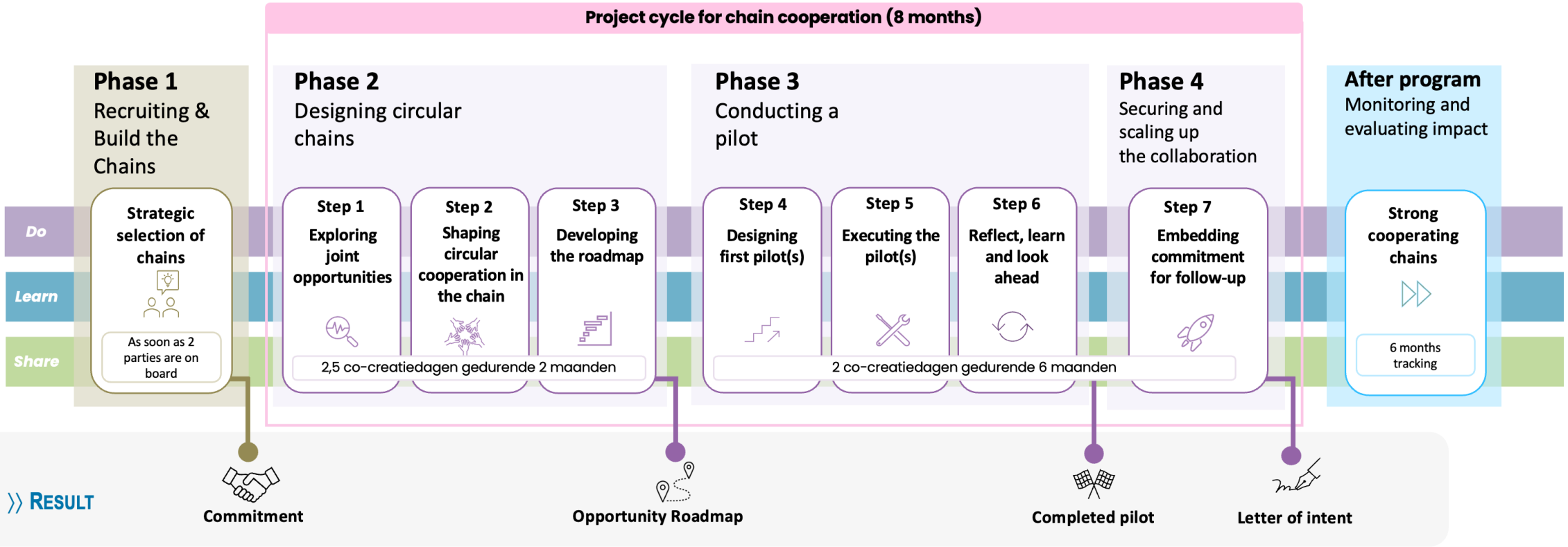
REWIN
koninklijke metaalunie
MIDPOINT BRABANT
Brainport Industries
BRAINPORT EINDHOVEN
mikrocentrum High Tech Platform
Fontys
TU/e EINDHOVEN UNIVERSITY OF TECHNOLOGY
smart industry hub zuid
FME POWERED BY DUTCH TECHNOLOGY
Brabantse Ontwikkelings Maatschappij BOM
Provincie Noord-Brabant

Toward a circular manufacturing industry through **chain collaboration**

The CVC Fast Forward 2025-2028 is facilitated by KplusV and ImpactX

circular value center

CHAIN COLLABORATION JOURNEY



- **A guided and structure process - creating joint roadmaps, implementing pilots, and establishing long-term partnerships.**
- **Flexible start**: chains can begin as soon as you are ready (min. 2 parties commit to participate in the chain project).
- No financial contribution required from participating companies, **only in-kind contributions (2 participants per party).**
- Each phase is built around a **co-creation session** in which all participating companies align their goals and focuses.

Accelerating together, outside of usual frameworks

PARTICIPATING COMPANIES OF PREVIOUS CVC FAST FORWARD (2023-2025)

Participants scored the CVC Fast Forward program a 4,3 out of 5!

**English is chosen as the default language for CVC FF to inclusively support the supply chain partners that may not originally Dutch companies.*

Chain 1

Circular plastics in cleanrooms

ASML · HQ GROUP · VINK · MITSUBISHI CHEMICAL GROUP

Chain 2

Circular model for a parcel sortation system

DHL · VANDERLANDE · Zollner · SIOUX TECHNOLOGIES

Chain 3

Turn residual metal to feedstock for AM industry

KMWE · SPACEXYZ · K3D

Chain 4

Setup circular electronic chain for electron microscop

ThermoFisher SCIENTIFIC · neways · SandGrain

A HIGH-PERFORMANCE CIRCULAR PLASTIC MODEL FOR CLEANROOM PACKAGING

HQ Pack, Vink, ASML, and Mitsubishi Chemical Group as one project team successfully tested circular materials (recycled POM-C) to be applied in cleanroom packaging. The solution will significantly reduce the carbon footprint of the materials involved (estimated reduction = 78% CO2 emission vs virgin materials).

- ✓ Design requirements with available products and R&D capabilities in the supply chain
- ✓ An agreement on quality control
- ✓ An approved testing process for new recycled materials

Click to watch the movie

This case was created and is owned by ImpactX, the facilitator of the previous CVC FF.

BLUEPRINTING A GAME-CHANGING CIRCULAR MODEL FOR A PARCEL SORTATION SYSTEM

- ✓ Insights from an end user such as DHL (representing the voice of the customer)
- ✓ Rethink the remanufacturing process to be integrated into normal production
- ✓ Learnings applicable to other projects

Vanderlande, one of its key customers, and suppliers Zollner and Sioux collaborated on implementing Cradle-to-Cradle principles for a new sortation solution. By exploring several circular design paths (Repair, Remanufacture, Recycle), all parties could see what was required to make change a reality. The final blueprint is believed to have potential of reusing 80% of materials & a significant reduction in carbon footprint (~50%).

Click to watch the movie

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FROM (RESIDUAL) METAL TO RAW MATERIAL FOR ADDITIVE MANUFACTURING

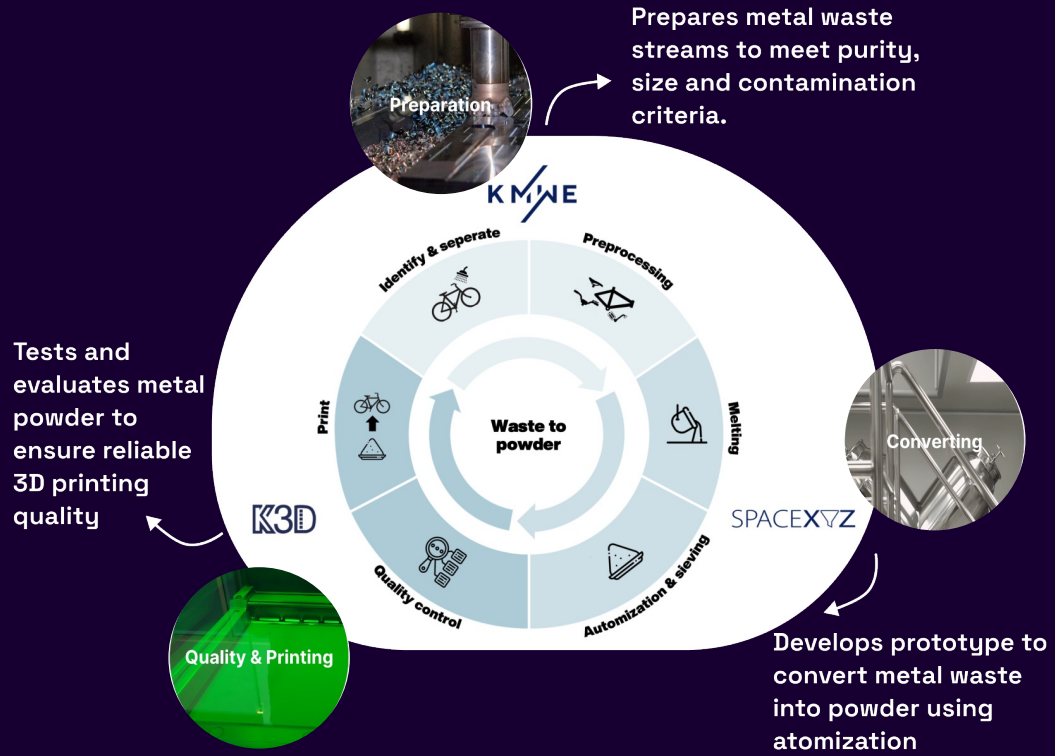
High-value alloys used in AM are expensive, scarce, and reliant on centralized recycling and global supply chains. Current metal waste is underutilized or discarded.

By jointly clarifying dependencies & responsibilities, and defining the direction of this powder value chain, the initiative has moved from concept to a ready-to-launch prototype.

Together, the chain has co-created the impact on:

- Lower material costs and CO_2 footprint, supporting sustainable manufacturing
- Strengthens supply chain resilience through localized feedstock
- Cuts waste & efficiently recovers (critical) metals by 90%

- ✓ Formed a future-ready circular consortium with a signed Letter of Intent(LOI) to scale the initiative
- ✓ Concept ready and execution plan set - focusing on creating a unique new value proposition
- ✓ Defined a 3-year roadmap and successfully submitted the grant application



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HOW TO PARTICIPATE?

Are you interested in the program, or do you have any further questions or ideas you'd like to explore?

You can register your interest by sending an email to uj@impactx.nl or d.groenevelt@kplusv.nl.

We'll get back to you shortly to explore together how CVC FF can support and strengthen your circular impact!