

### Brainport Industries

# Introduction CBPS

- Why: Circularity/reuse are the biggest opportunities for sustainability in semicon.
- First steps: Circular Innovation Program 2022-2024, circular innovation within the ASML semicon value chain, joint effort in exploring and implementing circularity.
- Current status: ASML and T1's recognize possibilities and have ambitions, and face comparable barriers.
- Starting point CBPS: Create a semicon value chain overview of opportunities and bottlenecks, to deepen knowhow, scale and increase the pace of adoption of circularity.
- Goal: Develop a joint CBPS multi year program (2025-2029) based on company needs and connect to knowledge institutes and financing.
- CBPS setup: Initiated by the Province of North Brabant and Brainport Industries, executed by the Brabantse Ontwikkelings Maatschappij (BOM) and ImpactX.





- Use fewer raw materials: narrow the loop
- A longer lifetime of parts, modules and equipment: slow the loop
- Reuse of products and product parts: close the loop

With the aim of security of supply, competitiveness and sustainability



## Brainport Industries

# Interviews & Co-creation sessions

- In depth interviews with 14 semicon value chain companies are the foundation of the program.
- 3 co-creation sessions with key players for validation and fine tuning.

























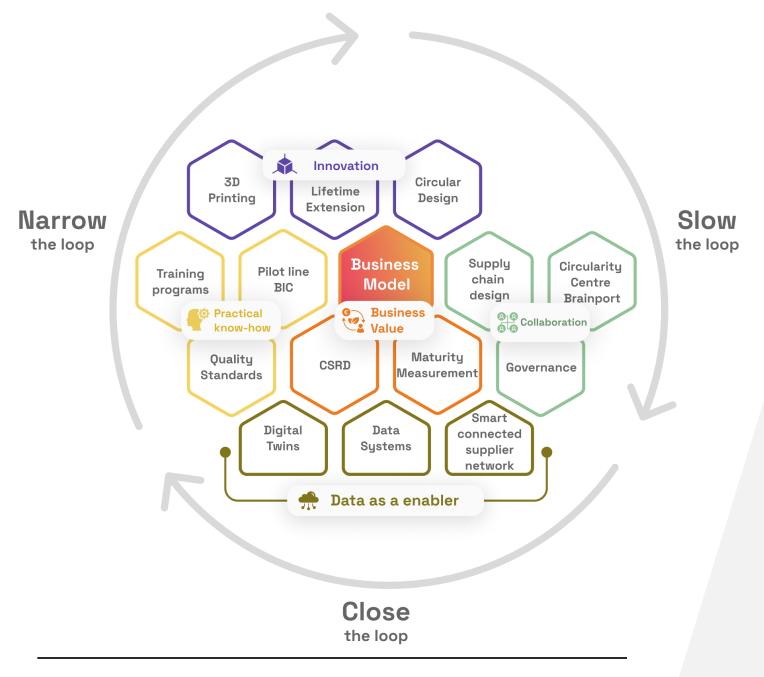




#### **VALUE CREATION** Lifetime extension and reuse as a long-term standalone **SECURITY** business activity " **OF SUPPLY** circular service center", **PEOPLE AND** By maintaining the data and technology **TALENT** installed base and reuse of are value in itself that It is easier to retain and parts, modules and can be monetized). attract people when you equipment, companies do the right things become less dependent on (meaningful/purpose): the supply chain and can fascinate, engage and continue to deliver retain. machines (quickly) (supply chain security critical raw materials). **DRIVERS CUSTOMER** (ECOSYSTEM) **DESIGN** INTIMACY Learning from failures, increase reliability and Strengthening market quality, take customer position (be a frontrunner experiences into to be distinctive), building sustainable relationships account, design aimed SUSTAINABILITY with suppliers, at extending lifetime customers, ecosystem, and reuse Reduce environmental meet market demands. impact, save raw material use, reduce climate impact, waste reduction, CSRD compliance.

#### Drivers of the circular transition

# Multiple circularity drivers



Visual overview of CBPS program



# Way forward after the summer 2024

- Further fine tune CBPS: content using the circular readiness framework and resources (finance).
- Work towards formal commitment and contributions (in time and cash) of participating companies and knowledge institutes.
- Look for opportunities to broaden the scope (number of companies and knowledge institutes within Brainport region), but also explore options towards other NL regions (Oost NL, IQ (Zuid-Holland), Flevoland).
- Make connections towards financing, subsidies, etc (ChipNL, Innovation coalition PNB, TKI, Horizon, ...).

## **Circular Business Program Semicon (CBPS)**

# **Questions?**

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Project by





Initiated by



**Provincie Noord-Brabant**