



Valmet Veturi – Beyond Circularity

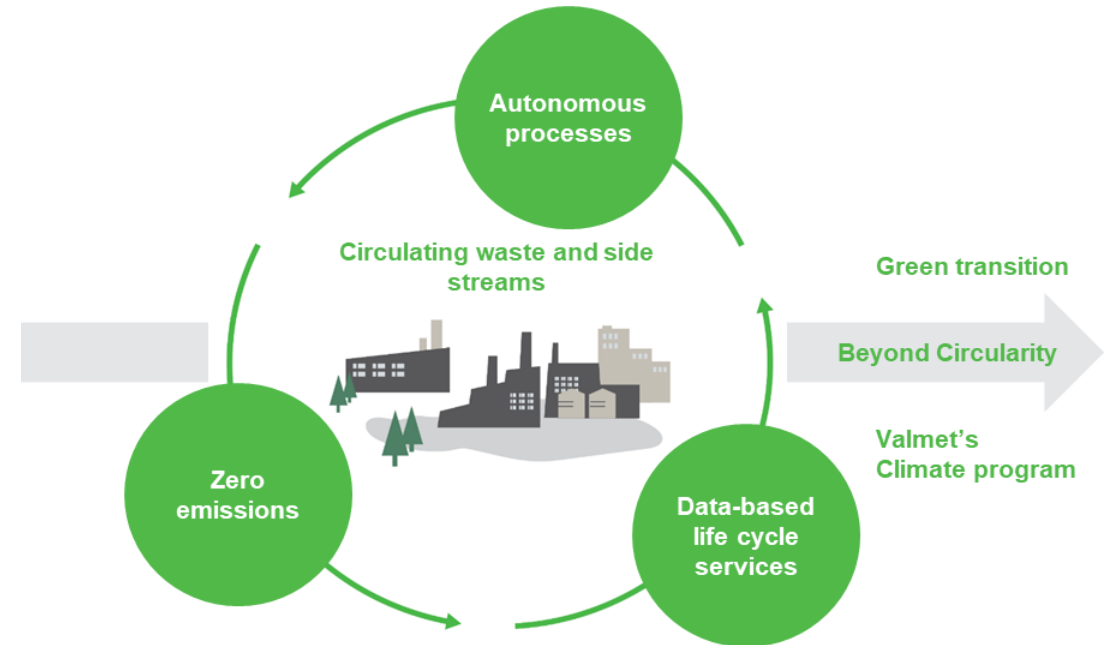
Transforming waste and emissions into valuable resources for sustainable growth

More information: [valmet.com](https://www.valmet.com)

Green transformation through Beyond Circularity



- Valmet’s program proposal “Beyond Circularity” was selected as one of the Veturi research and development initiatives by Business Finland in 2022
- The Beyond Circularity program is based on the Valmet’s Technology vision 2030 and the Climate program, targeting to
 - improve Valmet’s readiness to support the green transition in Valmet’s customer industries
 - support the implementation of Valmet’s Climate program, which sets ambitious targets in the areas of carbon neutral production and energy efficiency of Valmet’s current offering



Beyond Circularity program 2022-2025



Funding – Valmet

Valmet
40 MEUR

Business Finland
20 MEUR

- Valmet plans to invest EUR 40 million into the program during the upcoming four-year period
- The program is funded by EUR 20 million by Business Finland
- All projects included in Beyond Circularity will be selected by R&D management team
 - Valmet internal projects
 - ecosystem projects



Funding – Ecosystem

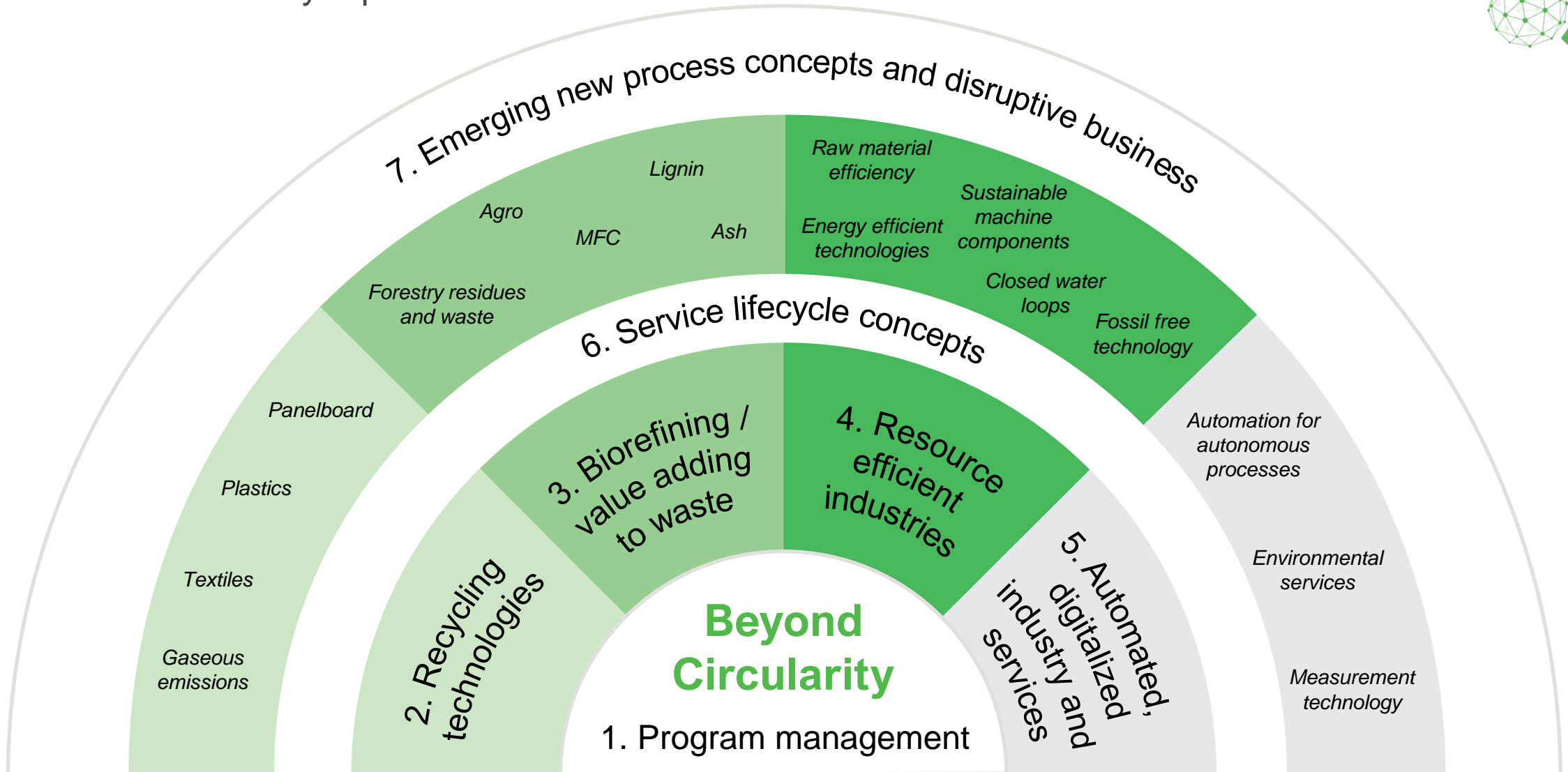
Ecosystem
50 MEUR

Business Finland
50 MEUR

- A new green transition ecosystem is to be built as part of this program to
 - create value and growth for the participants
 - expand competences to new areas
 - encourage best national and international partners in the field to join
- When a joint project is accepted to the Beyond Circularity ecosystem (Valmet approval), Business Finland funding can be applied for the project
- R&D investments are also required from the ecosystem participants

Beyond Circularity is implemented through seven streams

Streams and their key topics



Beyond Circularity – Schedule

★ Beyond Circularity starts

Project management

Recycling technologies

Bio-refining / value adding to waste

Resource efficient industries

Automated, digitalized industry and services

Service life cycle concept

Emerging new process concepts and disruptive business

ECOSYSTEM ESTABLISHMENT, RESEARCH AND EXTERNAL PARTNERING, COMMUNICATION

TEXTILES

PLASTICS

PANELBOARD

GASEOUS EMISSIONS

LIGNIN

AGRO

ASH

FORESTRY RESIDUES AND WASTE

MFC

RAW MATERIAL & ENERGY EFFICIENCY

ELECTRIFICATION & CARBON NEUTRALITY

CLOSED WATER LOOPS

SUSTAINABLE MACHINE COMPONENTS

AUTOMATION FOR AUTONOMOUS PROCESSES: Digital platform

ENVIRONMENTAL SERVICES

MEASUREMENT TECHNOLOGY

SERVICE LIFECYCLE VALUE PROPOSITION

PROCESS LIFE CYCLE MODELLING

EMERGING NEW PROCESS CONCEPTS AND DISRUPTIVE BUSINESS



Valmet