

SHAPE

Shaping the Green transition

CHARLOTTA RISKU GENERAL MANAGER INNOVATION AND ECOSYSTEMS

04.06.2026

Mission and Situation Overview

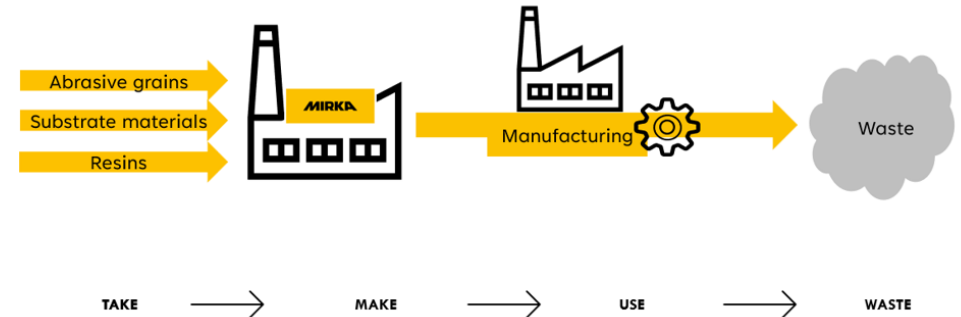
Mission: Shaping the Green transition - with net carbon negative surfaces (SHAPE)



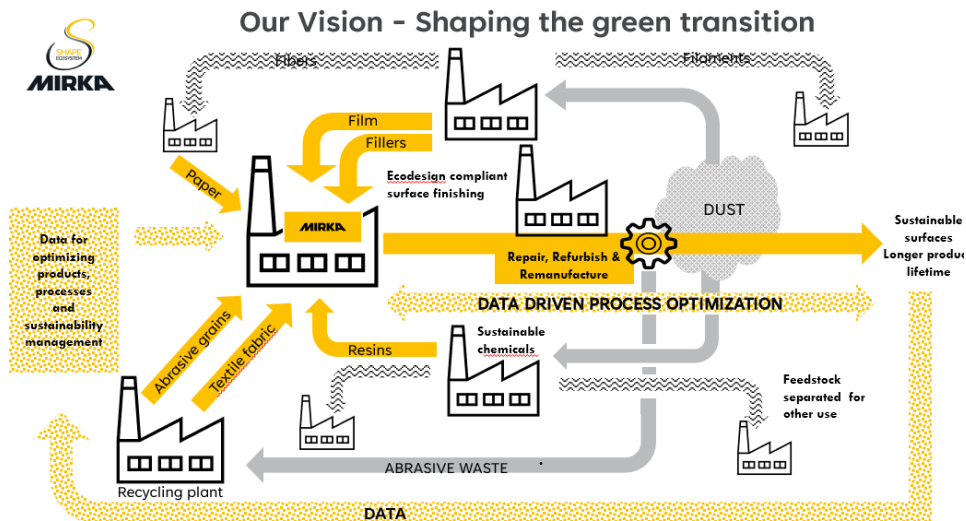
Urgent challenges and unmet needs

• **Manufacturing remains a major emitter:** Accounts for 20–23% of EU GHG emissions, and sector emissions increased again in 2024 despite efficiency gains.

Circularity is stalling: Only 11.8% of materials are cycled in the EU (7.2% globally), meaning 90% of resources are still lost to waste or long-term stock. As an example the global recycling rate of textiles (fiber to fiber) is only 1% with most material ending up on dumps or incinerated



SHAPE exposed critical gaps



- **Scaling** bio-based and recycled feedstocks require focus on value chains and nurturing the growth of business ecosystems.
- Simultaneously next level of circularity require going beyond by exploring **regenerative** potential.
- **Remanufacturing feasibility**, urge for intelligent automated solutions

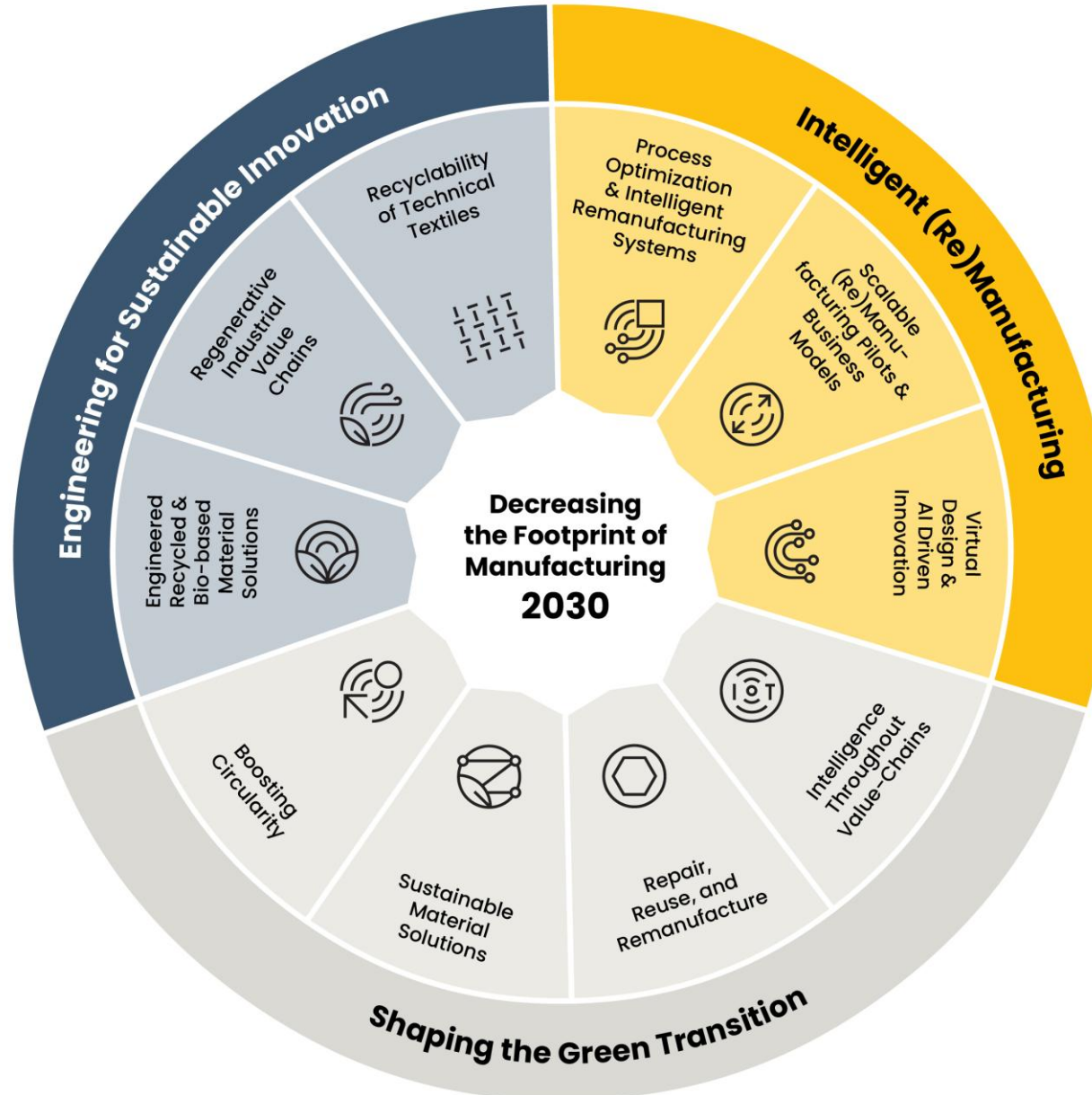
SHAPE 2023- 2030

SHAPE 2025

>20 ecosystem projects
200+ partners in Finland

Investments

CIGMA- abrasives recycling plant
M.INC – Incubator
Surface center of excellence
Turku



SHAPE 2023-2027

Funding
10 m€ Mirka
20m€ Ecosystem

+

Extension 2026-2030

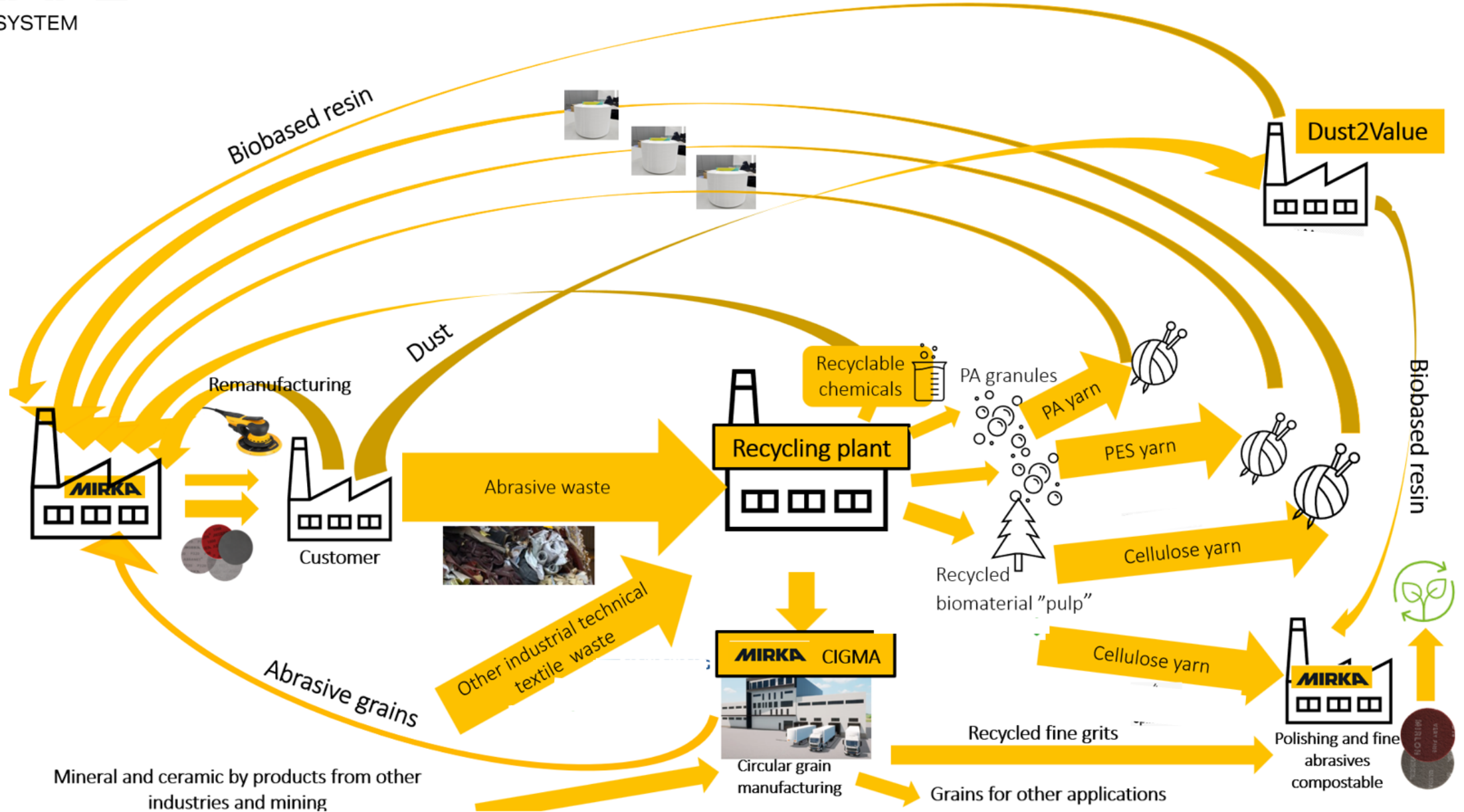
Funding
10 m€ Mirka
30m€ Ecosystem

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2023-2030
Funding
20 m€ Mirka
50m€ Ecosystem

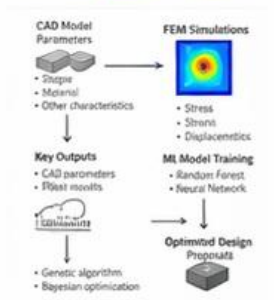
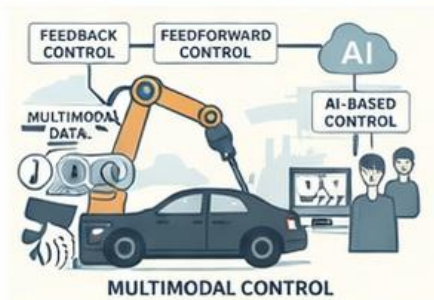
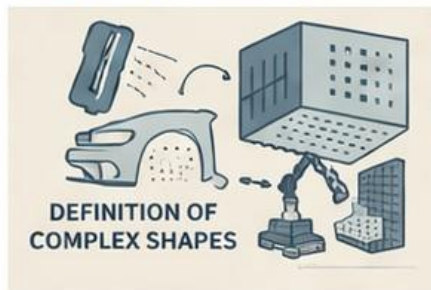
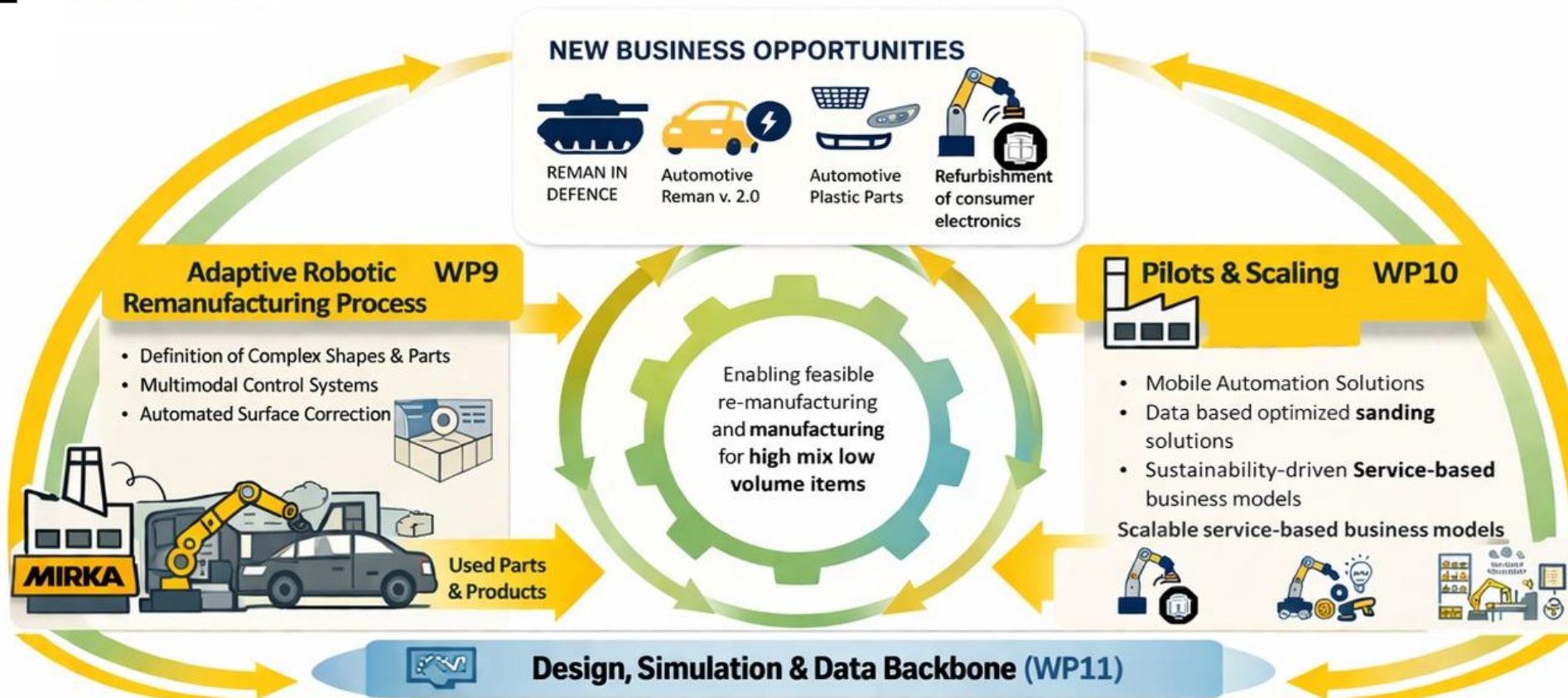
Scaling from Circular To Regenerative Value Chains

Engineering for Sustainability WP 6, WP7, WP 8



Perspectives on innovation driven (re)manufacturing

Solving the (re)manufacturing feasibility challenge – WP9, WP10, WP11



SHAPE Core Team



Charlotta Risku, SHAPE Programme Manager

Mats Bystedt, Business Development Manager, WP3 and WP10

Petra Härmälä, Technology Manager Sustainability & Circularity WP 1 & WP7

Markus Kass, Technology Manager Material Technology WP 2 & WP 6

Maria Smeds Engström, Green Transition Program Manager WP 5

Viktor Sundholm, Project Manager M.INC & VBB

André Norrback, Technology Manager Process Technology WP4, WP 9, WP 11



Ida Koivisto, Technology Manager WP 8



Hanna Sjöberg, Project Manager SHAPE, Ecosystems & Co-innovations



Mats Sundell
DCEO, CTO



Beatriz Meana Esteban
Development Manager
Bonded Abrasives



Heidi Heino
Business Sustainability
Manager



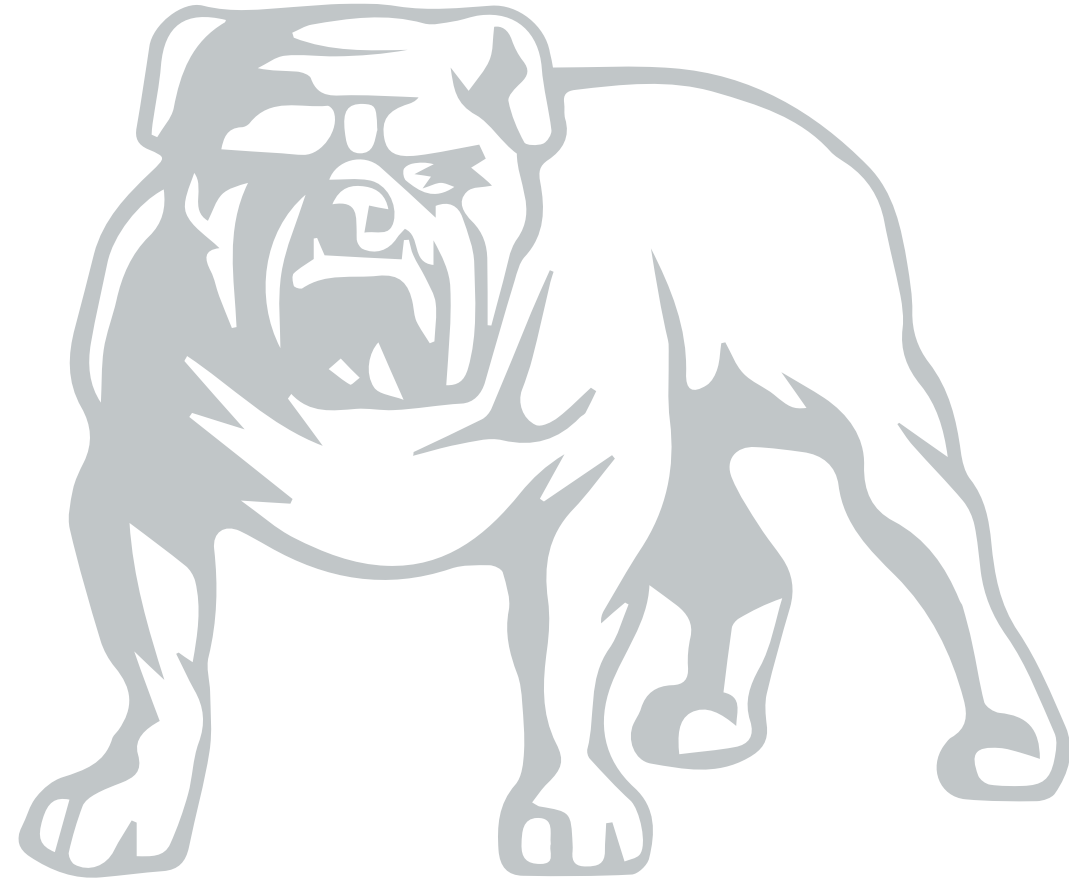
Caj Nordström
Technology Manager
Power Tools



Tomas Sjöberg
Application
Development Manager

>60 involved as WP and task leaders and in projects, so far...

- Maria Smeds Engström, Hanna Sjöberg, Charlotta Risku, Heidi Heino, Lina Strang, Mats Sundell, Markus Kass, Ann-Louise Hakalax, Minna Siekkinen, Beatriz Meana Esteban, Monireh Imani, André Norrback, Aryan Kahn, Anders Strand, Amanda Sund, Jonathan Lohoff, Oskar Jansson, Lasse Lavikainen, Ralf Sjösten, Rosita Bjon, Isac Haldin, Kristiina Ahonen, Petra Härmälä, Niklas Frände, Tomas Sjöberg, Ida Koivisto, Marjo Ojakoski, Caj Nordström, David Wargh, Tomas Södergård, Vilhelm Sundstedt, Mathias Rönnlund, Mika Adler, Tom Wiklund, Mats Bystedt, Jyri Salomaa, Ida Nordell, Matias Laitala, William Antus, Leonardo Gómez, Christer Kavander, Jevgeni Gennadiev, Simon Lind, Viktor Sundholm, Sigurgisli Mellberg, Annika Stenmrk, Jan Grön, Veli-Pekka Västi, Paolo Benvenuti,



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