

INNOVATION FORUM

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PLAST2bCLEANED



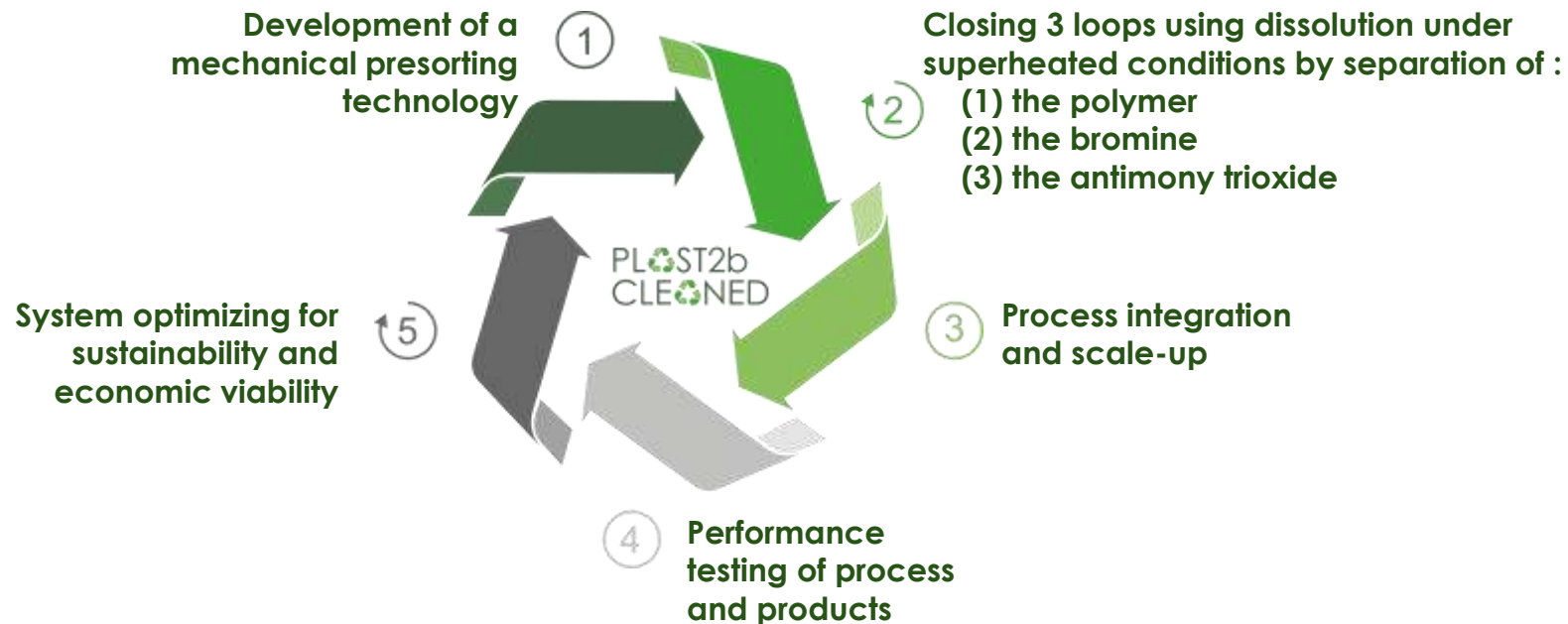
Executive summary

- Project Name: PLAST2bCLEANED
- Project start/end: 1st Jun 2020- 29th Feb 2024
- Coordinator Name and Contact: Esther van den Beuken,
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- Project website: <https://plast2bcleaned.eu/>
- Project LinkedIn: <https://www.linkedin.com/company/plast2bcleaned/>



Project description

- The overall aim of PLAST2bCLEANED is to develop a human and environmentally safe recycling process for Waste Electrical and Electronic Equipment (WEEE) plastics in a technically feasible and economically viable manner.



Main project outcomes

- Achieved Project outcomes

1. **A presorting prototype at TRL5 based on Raman spectroscopy and Machine Learning.** This prototype is able to presort ABS and HIPS in real-time. For application in industrial setting, performance needs to be further improved.



2. Dissolution of WEEE plastics in superheated solvents,
3. Separation of additives to concentrate BFR and ATO fractions for recycling;
4. Energy efficient recovery of solvent and of polymer.

Clustering

- Requested Collaboration points

Collaboration for further research to further develop the PLAST2bCLEANED technology at higher TRL-level and scale-up.

- Key policy message:

To perform further research and investing in scaling up plants, there is a strong need for a stable investment climate which can only be created by a consistent set of policy measures to arrange a sustainable and equal level playing field for complex recycling of brominated EEE waste in the EU, addressing:

1. Equal EU transboundary requirements for all plastics containing products, half-products, raw materials and wastes.
2. A stable regulatory environment for substances of concern with clear and realistic limit value projections.
3. Creating an internal market for circular plastics, decoupled from the virgin plastics market.
4. Creating sufficient plastic waste supply by increase of recyclable waste streams and by banning export of plastic waste.
5. Internalize CO2 externalities, i.e. include CO2 price in the cost price in the plastics value chain including recycling.

Thank you

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