

Ploto

Product Passport through Twinning of Circular Value Chains

HORIZON-CL4-2022-RESILIENCE-01-01

Ploto

Full Title: Product Passport through Twinning of Circular Value Chains

Aim:

Ploto aims to deliver a Circular and Resilient Information System (CRIS) to support manufacturers in their green, digital and circular transition. CRIS enables waste reduction and end-to-end traceability of Secondary Raw Materials (SRM) through interconnected digital services for real-time decision-making, monitoring and certification of materials and products, relying upon a digital transformation strategy pertinent to process industries.

Concept:

Resource management in Europe is moving from a linear to a circular model, with waste reduction and end-to-end Secondary Raw Materials management being at the centre of this transition, for manufacturers across the continent. Ploto envisages enabling the adoption of a circular (closed) flow of resources to the industrial processes based on SRMs, thus creating sustainable supply chains and leading to industrial symbiosis as firms use each other's waste as resources. By analysing the needs of three industries, Ploto intends to increase value chains' efficiency via the use of Product Passports and Balanced Scorecard tools, with two critical sets of results: (a) To demonstrate an increase in waste reduction through digital technologies and (b) To demonstrate optimisation of the use of secondary raw materials in the value chains. To achieve that, Ploto relies upon a Digital Transformation Framework based on traceability strategies, SRM reference processes, product/material passports and governance models, as well as a Platform of interconnected Cognitive Digital Twins (CDTs) leading to the overall Ploto CRIS.

Start date:

01/01/2023

End date:

31/12/2025