



PILOT 1.1: Green manufacturing and CO2 footprint monitoring

Switzerland Innovation Park Biel

Pilot & Scenario Overview



Switzerland Innovation Park Biel/Bienne (SIPBB) is responsible for the first scenario in pilot 1, taking place in the Swiss Smart Factory in Biel/Bienne. SIPBB is a private Swiss non-profit organisation that conducts and supports industry-related and primarily applied research and development. It aims to foster sustainable, human-centered and resilient manufacturing industry.



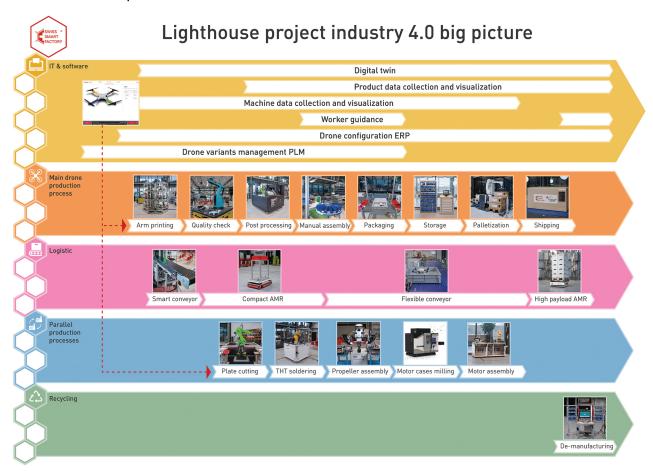
Infrastructure & Technology-

The infrastructure is supplied by Nasertic, while the Swiss Smart Factory offers a 1000 m² testing and demonstration platform focused on Industry 4.0. This space features a large production line dedicated to manufacturing quadcopter and hexacopter drones with batch size 1 capabilities.

APIs are currently being integrated with selected project assets, and the Air Management System from SMC has already been installed. Additionally, Node-Red is being utilized to calculate the carbon footprint of the products. The next phase of the project involves the deployment of aerOS domains.

Objectives & Benefits

In Scenario 1, Green Manufacturing and CO₂ Footprint Monitoring, aerOS facilitates the generation of more precise data on product carbon footprints. This enables the implementation of a Digital Product Passport (DPP), increasing customer awareness of the environmental impact of their purchases. Additionally, data analytics will help optimize production and logistics processes, further reducing the overall carbon emissions of the products.



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