Use of blockchain to exchange information along the value chain, supporting sustainable and circular economic models (Lorenzo ZULLO - ChemChain)

Abstract - The regulatory landscape is rapidly evolving to support the commercialization of eco-friendly, durable, and recyclable products. Digital product passports are on the verge of becoming indispensable, especially in sectors such as textiles, electronics, furniture, and construction materials. The need for sharing and tracking material and product information is growing to enhance transparency and accountability. Simultaneously, it is crucial to protect sensitive data and proprietary knowledge.
In this context, ChemChain is a pioneering blockchain platform streamlining the exchange of chemical information within products throughout the value chain. From chemical manufacturers to end consumers, recyclers, and waste management operators, ChemChain transforms how data is securely managed. Through extensive pilot programs with major chemical firms and their supply chain partners, ChemChain demonstrated how enhancing information flow and access control, ultimately empower the efficient collection and recycling of end products. The result: a more sustainable, circular economy."