ChemSkills

Enabling the green and digital skills transformation of the chemical industry.

Report on ChemSkills Interviews Results
2nd iteration in Consumer Chemicals Sector

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Executive Summary

The twin transition, defined as the combined process of digitalization and green transformation, represents a key priority for Europe's consumer chemicals sector, which includes detergents, cosmetics, paints, adhesives, and other mass-market goods. Companies in this sector face challenges arising from stringent regulations, emerging technologies, and increasing sustainability demands. The adoption of new digital technologies—such as artificial intelligence, automation, and the Internet of Things—aims to improve production efficiency, traceability, and sustainability. Simultaneously, the green transition drives the redesign of business processes, the development of environmentally sustainable products and services, and compliance with increasingly stringent European regulations on emissions, circular economy, and supply chain traceability.

The research, conducted across 13 European-based companies, collected 37 case studies of training initiatives (17 on digitalization and 20 on environmental sustainability). The findings show that companies adopt a two-tier training model: an initial literacy phase targeting a broad range of employees, followed by specialized programs for specific functions or professional profiles. Digital training emphasizes generative AI, cybersecurity, digital communication, omnichannel customer management strategies, automation, and process monitoring and maintenance. Green training focuses on ESG principles, eco-design, Life Cycle Assessment (LCA), green claims management, and compliance with sustainability and regulatory standards. Public initiatives further support networks among students, young professionals, and companies to foster conservation, sustainability, and collaborative innovation.

Partnerships with universities, higher technical institutes, and other learning institutions emerge as a cross-cutting factor, enabling companies to integrate specialized skills not always available internally and to maintain up-to-date training content. The development of

advanced skills and new professional profiles also relies on a coordinated ecosystem approach, where companies collaborate with educational institutions, research centers, public actors, and sector partners, including employer associations.
A key challenge identified is the limited systematic assessment of training initiatives, which can impede evaluation of their effectiveness, identification of areas for improvement, and alignment of skill development with current and future needs.
Overall, the analysis demonstrates that structured training on digital and green skills represents a strategic lever to support the twin transition. By promoting the adoption of new technologies, disseminating sustainable practices, and developing internal capabilities, companies can strengthen competitiveness, foster innovation, and ensure workforce adaptability in a rapidly evolving sector.

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