

## Eco-Innovation application in Jordan

Eco-innovation is the development and application of a business model, shaped by a new business strategy that incorporates sustainability throughout all business operations based on life cycle thinking and in cooperation with partners across the value chain. It entails a coordinated set of modifications or novel solutions to products (goods / services), processes, market approach and organizational structure which leads to a company's enhanced performance and competitiveness.



A Sustainable Consumption and Production National Action Plan (SDG12.1) was developed in Jordan through nationally owned multi-stakeholder processes, based on the country's priorities for green economic growth and circular economy. The implementation of the plan's priorities - agriculture and food, transport and waste management is on-going through selected projects and initiatives.

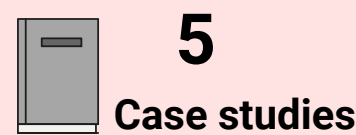
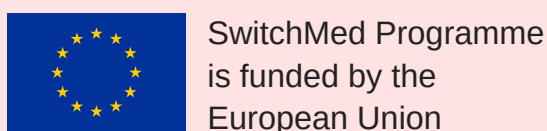
In synergy with the EU-funded SwitchMed project, United Nations Environment Programme (UNEP) engaged small and medium sized enterprises (SMEs) in Jordan in an eco-innovation process by facilitating policy and technical conditions that enable systemic innovation and by complementing local expertise through capacity building activities. The implementation of Eco-innovation approach in the project has reduced the risks of chemicals uses, promoted the replacement of chemicals in products and processes by less hazardous ones and the development of economically viable products and processes that are sustainable and less hazardous in the long run. Thus it has contributed to the implementation of Sustainable Production and Consumption National Action Plan (SCP-NAP), developed through SwitchMed.

### Capacity building in SMEs

Five companies were supported in finding alternatives for the replacement of identified hazardous chemicals. The sustainable benefits are gained in identifying new market opportunities for their newly developed products, ensuring their competitiveness in the local and international markets, and complying with national and international regulations on the sound management of chemicals.

### Eco-innovation Manual application

The Eco-innovation manual was translated into Arabic. Around 50 stakeholders from industry associations, companies, and ministries of the government were trained with Eco-innovation processes and technical knowledge related to the sound management of chemicals.





## Success cases for Jordanian industry

The Eco-innovation methodology implemented in five selected SMEs:



- Sigma produces household and industrial detergents, skin and haircare products.
- Sigma developed a new business strategy aiming by 2020 and engaged in a new business model to produce powder and liquid laundry detergents replacing hazardous chemicals like parabens, which are endocrine disruptors and may cause certain types of cancer, thus affecting the health of workers and consumers.



- Sipes produces emulsion, industrial paint, oil paint, pastes, waterpaint, nitro cellulose paint.
- Sipes applied a life cycle thinking across the product's life stages to identify alternative solutions for eliminating lead pigments. This also motivated by national regulations in Jordan banning lead chromate in non decorative paints by 2022, and global efforts for lead elimination in paints. The company developed a new business model to produce lead-free automotive and road-marking paints for the Jordanian market by 2020.



- Site Group provides well drilling services
- A new foaming agent was formulated with less hazardous substances and manufactured with a fully automatized process. This will result in significantly fewer health risks to the company's staff caused by occupational exposure and contact, and reducing environmental damages to soil and water resulting from the foaming agent use and discharge.



- Al Qawafel Agro produces fertilizers, chelating agents of micronutrients and organic pesticides.
- Al Qawafel Agro at Al Arabia site targeted the sound management of 25 ton per day of liquid hydrochloric acid (HCl), a by-product of potassium sulfate production, which is stored on-site in plastic containers. The company started identifying potential new customers in this industry, where HCl can be sold as a valuable material. Through reducing the amount of HCl stored on site, the company targets reducing health risks faced by staff members who handle liquid HCl.



- Giant Industrial Group (Al-Emlaq) produces laundry, household and personal care cleaning products.
- With a strong commitment from their top management team to engage on eco-innovation, Al-Emlaq developed a new business strategy aiming at being recognized in Jordan and the EU markets for their products manufactured with less-harmful substances, i.e. elimination of preservative substances in the dish washing liquid detergents and resulted in reduced health risks on workers and consumers.



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## UN Environment Programme

UNEP is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system, and serves as an authoritative advocate for the global environment.



The EU-funded SwitchMed programme assists eight countries in the southern Mediterranean to switch to sustainable patterns of consumption and production and supports national and regional stakeholders in achieving productive, circular, and sharing economies in the Mediterranean. [www.switchmed.eu](http://www.switchmed.eu)