

# Unlocking the Potential of Circular Economy in Lebanon: A Spotlight on the 2Circular Project

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# Circular Economy



Circular Economy is a regenerative system that challenges the traditional linear model of "take-make-dispose."



It aims to design out waste, promote sustainability, and ensure resources are reused, recycled, and restored in a closed-loop system.

# Principles of the Circular Economy



## Design for Longevity:

Encourage products to be designed with durability in mind, ensuring a longer lifespan. This involves using high-quality materials and robust construction methods.



## Maintain and Extend Product Life:

Promote practices that facilitate the repair, refurbishment, and maintenance of products, thereby extending their useful life.



## Promote Reusability:

Design products and packaging with reusability in mind, encouraging consumers to use items multiple times before disposal.



## Prioritize Recycling:

Focus on creating products that are easily recyclable and implementing effective recycling systems to ensure materials are reintegrated into the production cycle.



## Close the Loop:

Aim to create a closed-loop system where materials are continuously reused, eliminating the concept of waste.

# Situation In Lebanon

Lebanon has struggled to deal with the enormous demographic burden and social and economic consequences of the Syrian crisis since it began in 2011.

The financial crisis which arose in the second half of 2019 has put the country under further strain.

A depreciation of the Lebanese currency, capital and banking restrictions in an import-dependent economy.

# Environmental Situation in Lebanon



## **Waste Management Crisis:**

The waste management crisis in Lebanon is characterized by inadequate infrastructure, improper waste disposal and the proliferation of landfills.



## **Air and Water Pollution:**

Industry is impacting public health, ecosystems, and the overall quality of life.



## **Deforestation and Biodiversity Loss:**

Increasing need to preserve Lebanon's unique ecosystems and natural heritage.

# Benefits of Circular Economy in Lebanon

Circular Economy practices can stimulate economic growth by creating new jobs in sectors such as recycling, remanufacturing, and sustainable product design.

Efficient resource use in a circular system minimizes waste and reduces the need for raw material extraction, positively impacting the economy.

Circular Economy minimizes environmental degradation by decreasing pollution, reducing greenhouse gas emissions, and conserving natural resources.

# Benefits of Circular Economy in Lebanon



CIRCULARECONOMYINDUCES  
REDUCTIONINWASTE  
GENERATIONTHROUGH  
CIRCULARAPPROACHES,  
COMPAREDTOETHETRADITIONAL  
LINEARMODEL.



CIRCULARINITIATIVESOFTEN  
INVOLVELOCALCOMMUNITIES,  
FOSTERINGASENSEOF  
OWNERSHIPAND  
RESPONSIBILITY.



COMPAREDTO LINEAR ECONOMY,  
CIRCULAR PRACTICES WILL RELIEVE THE  
PRESSURE ON THE LEBANESE ECONOMY  
BOTH DIRECTLY AND INDIRECTLY AND  
WOULD HELP AMELIORATE THE  
FINANCIAL SITUATION.

# Resource Efficiency Projects in Lebanon

Resource efficiency has been applied to all size of companies, through MEDTEST II and III, demonstrating the business case for making companies more efficient, environmentally sound and with relevant costs savings.

Professionals have been trained and these capacities are now planned to be extended with the EU and UNIDO's collaboration through the 2Circular Program.



# 2Circular Project



# Industrial Zones in Lebanon



Industrial zones have been a critical area that requires further development to achieve national development objectives.



We have studied the opportunities of improving the policy framework to mainstream RECP in the development of industrial zones and explored models to provide technical assistance more tailored to the reality of SMEs in IZ.

# Application to the Dairy Sector



Adding value to whey from dairy sector, a circular economy case, has been a multifold initiative.



On the one hand, it has shown that it is possible to reintegrate an otherwise waste from dairy, to produce new high-quality products, which translates into the reduction of high environmental impacts when this whey used to be dumped to water bodies, while circular economy is promoted.



On the other hand, the initiative also joined the work of industries and academia thanks to the collaboration of experts from universities.

# Challenges of Circular Economy in Lebanon



ECONOMIC CRISIS



GOING FROM THE  
STRATEGY TO THE  
IMPLEMENTATION



REGULATING THE CIRCULAR  
ECONOMY  
AND GENERALIZING IT  
BEYOND FOOD INDUSTRIES

# Opportunities of Circular Economy in Lebanon



The economic crisis has pushed the Lebanese industries to relook their operational model and consider more easily the shift from a linear toward a circular model.

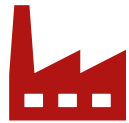


The financial crisis has induced new industries in Lebanon to substitute traditionally imported products.



The increase of energy prices in Lebanon made renewable energies and resource efficiency technologies much more economic than previously.

# Lessons Learned From Experiences in Lebanon



The importance of complementary and integrated Industrial Zones



Savings from the implementation of Renewable Energy Cleaner Production processes



Looking into applying this process to all industrial sectors by having the adequate decrees and administrative decisions

# Priorities Moving Forward

## Duplicating

Duplicating the experiences learned from applying the RECP in the food industry sector to other sectors.

## Replicating

Replicating the good practices of implementing circular economy principles in Tunisia and Morocco in the plastic and textile industries.

## Having

Having necessary decrees and administrative decisions.

## Exploring

Exploring potential in the textile, shoes, furniture and ICT sectors.

## Updating

Industrial Statistics

# Thank You!

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