## Meeting objectives

- 1. To analyze the current status of CE based on selected policy documents and flagship projects in countries in the Arab Region.
- 2. Share countries' experience in mainstreaming CE practices and priority needs in institutional coordination, regulatory instruments, finance, governance and capacities in selected sectors (waste management, agriculture, industry, energy.) and their implication on biodiversity and ecosystems health.
- 3. To discuss available opportunities to enhance and support regional cooperation for a faster transition from linear to circular economy in the Arab region.
- 4. To develop an outline of a regional road map, setting priorities, framework conditions and the delivery mechanism to engage young entrepreneurs as champions to lead the transition to CE.

### Agenda

Session 1:

Current Status, Challenges and Opportunities of the Circular Economy (CE) in the Arab Region

Session 2:

Countries experiences in moving from linear to Circular Economy

Coffee Break

Session 3:

Roadmap for promoting CE in the Arab region

Session 4:

Youth, entrepreneurship, and transition to circularity in the Arab region

# Circular Economy in the Arab Region: Current Status, Challenges and Opportunities

Mr. Hammou Laamrani Economic Affairs Officer, UNESCWA









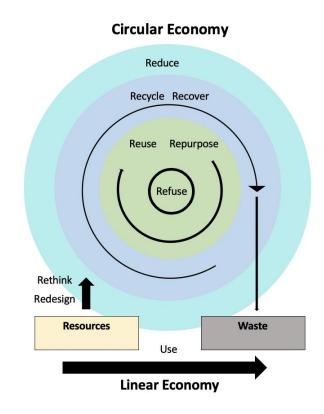
\*. Introduction

\*. Circular Economy in the Arab Region Status and progress Challenges and Enablers

\*. The way forward

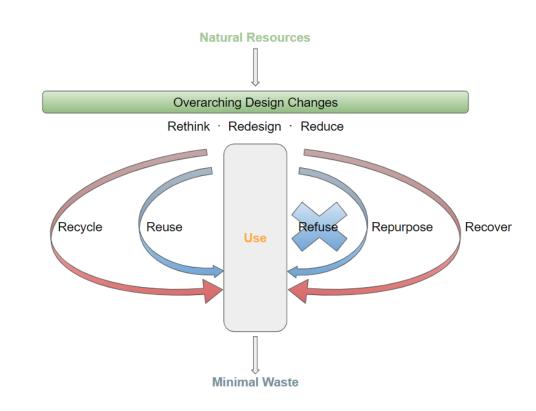
#### Multiple definitions one purpose

- Circular Economy is a cross-sectoral approach to development where circular systems are designed to favor solutions that upgrade ecosystems and keep the value of resources within the system for as long as possible.
- Renewable and finite resource management is guided by the circular model which includes the restorative and regenerative practices of rethink, redesign, reduce, refuse, reuse, repurpose, recycle, and recover, to achieve a sustainable use of natural resources while advancing social equity and economic prosperity.



#### From Value Chains to Circular Value Systems

- Rethink business models to include used resources or a sharing of resources
- Redesign products to last longer and be recyclable, and systems to be regenerative
- Reduce natural resources used in the design, production, manufacturing and during any of the circular loops, through efficiency measures
- Refuse products or services that are not needed and environmentally harmful
- Reuse products until they are not fulfilling its original purpose
- Repurpose products, components, and materials outside its original purpose
- Recycle through physical or chemical processes
- Recover energy through incineration or nutrients through biological recovery



#### Circular Economy: great potential

50% reduction of the Greenhouse gases needed to meet the Paris Agreement

90% of global biodiversity loss are due to unsustainable natural resource use

730 tons of plastic marine litter are added daily to the Mediterranean sea

The new global economic growth due to a Circular Economy, in 2030, estimated to 4.5 trillion dollars

138 billion dollars could be saved in resource spending in the GCC states until 2030

Redistribution of economic resources and responsibilities

77 thousand jobs created in circular waste management in Saudi Arabia

270 thousand deaths due to air pollution in the Arab region every year

## An urgent need for the Arab region

- \* Resources Scarcity
- \* Resources depletion
- \* Exponential increase in waste produced
- \* Resource use inefficiency

All exacerbated by urbanization and demography

# Circular Economy as an Imperative for Sustainable Development in the Arab Region

<u>Circular Economy is today included in a range of development documents in the Arab Region</u> (containing visions, strategies, policy recommendations and indicators to measure progress)

All 17 Arab states mapped have documents focusing on the sustainable use of natural resources including circular practices.

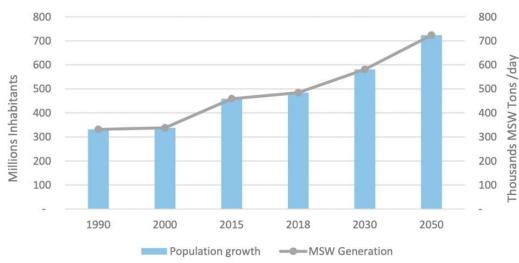
- Nationally Determined Contributions (Kuwait, Saudi Arabia, Qatar, Egypt, Tunisia, Lebanon, Jordan, Iraq, Mauritania, Somalia, Palestine)
- Voluntary National Reviews (Bahrain, Kuwait, Algeria, Morocco)
- National Circular Economy documents
  - United Arab Emirates 'Circular Economy Policy 2021-2031' & 'Circular Economy Council
  - Qatar 'Circular Economy Policy Paper' (2022)
  - Saudi Arabia 'Circular Carbon Economy National Program'
  - Jordan 'Climate and Resource Protection through Circular Economy in Jordan 2017-2021'
  - Regional African cooperation (started in 2016) 'The African Circular Economy Network' (Arab member states: Morocco, Sudan, Tunisia, and Somalia)
  - SwitchMed guiding 7 Arab states (Algeria, Morocco, Tunisia, Egypt, Palestine, Jordan and Lebanon)

# Challenges and enablers

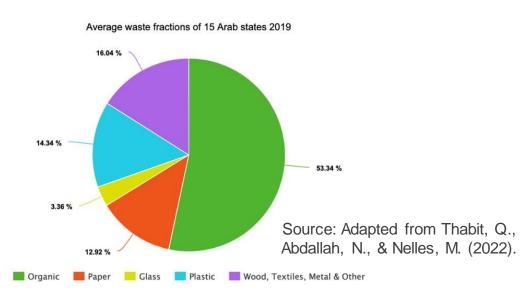
	Challenges	Enablers
Policy	<ul><li>Sectoral</li><li>Driven by public investments</li></ul>	Mainstreaming CE in development policy
Institutions	Coordination vs fragmentation	Build on exiting coordination mechanisms
Governance	Decentralize and localize	Involve stakeholders at the design stage
Regulations	Gap between regulations and implementations/enforcement	Auditing and engagement of CSOs
Capacities	Whose capacity matters	
Finance	Bankability through innovative mechanisms	SDGs and Climate finance mechanisms

#### Solid Waste Management in the Arab Region

- A limited part of a Circular Economy since its handling already created waste, which in a circular system should be designed to not be created or at least minimized
- But proper waste management has great potential:
  - Incinerating municipal solid waste would emit less than half of the carbon dioxide emissions compared to the current storage in landfills (840 kg to 415 kg/ton)
  - Countries that takes care of their waste has created multi billion dollar economies. Germany's waste management sector has an annual turnover of 70 billion Euros.



Graph showing population growth and municipality solid waste in the Arab region since 1990. Source: Copied from Thabit, Q., Abdallah, N., & Nelles, M. (2022).





# Morocco: Innovative solutions in agriculture are strengthening local farmers' resilience

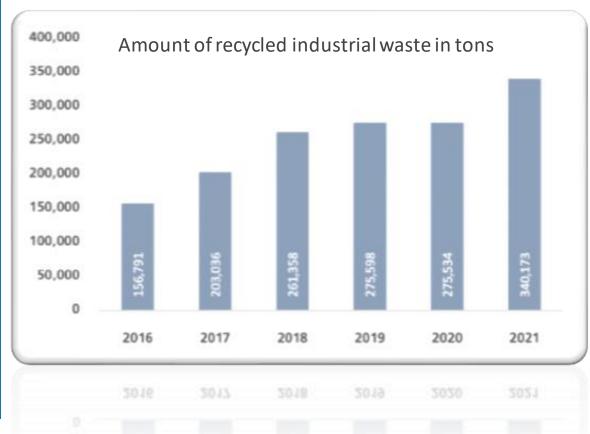
- Collaboration between Biodôme du Maroc and the Switchmed Program
- A new solution for farmers in, a small-scale local tank which produces biogas and fertilizer through the methane production from organic waste, animal waste and wastewater
- Instead of leaving the waste in piles, untreated on the farms, leaking greenhouse gasses, it is used to recover energy and nutrients
- Supplement previous use of oil for irrigation and provides local organic fertilizer
- Diversifying farmer's income, created new employment opportunities





# Saudi Arabia: Increased recycling rates through strong governance and best practices

- Ambitious goals: 2030 diverting 82% waste from landfills mainly through recycling, composting and incineration; reach a 100% handling of new waste through recycling, fuel, and energy production
- Expected outcomes by 2035: 73 million tons of reduced CO2 emissions, 346 million BTU produced, 120 billion SAR added to the economy, and 77 thousand employment opportunities created
- Created a shared vision reaching several governance levels and including both private companies and several ministries, and put it as a national top priority
- Jubail and Yanbu improved their industrial waste handling, recycling grew by 23% in 2020, now more than 60% waste



Source: General Authority for Statistics (2021). Environment Statistics Publication.



#### **CIRCULAR ECONOMY**

An Opportunity to be Seized for Sustainable Development in the Arab Region

March 2023





#### Transforming to a Circular Economy in the Arab region

Working Paper: Introducing a Circular Economy: Status and Enabling Conditions

March 2023



https://www.unescwa.org/events/circular-economy-transition-opportunities-and-challenges

### Regional Roadmap

#### \*What priorities:

- In policy and institutions
- In capacity building
- In fostering the regional cooperation and coordination
- In partnerships between governments, private sector, NGO and CSOs
- In actions for UN, INGOs organizations