



# Third International TouMaLi Conference

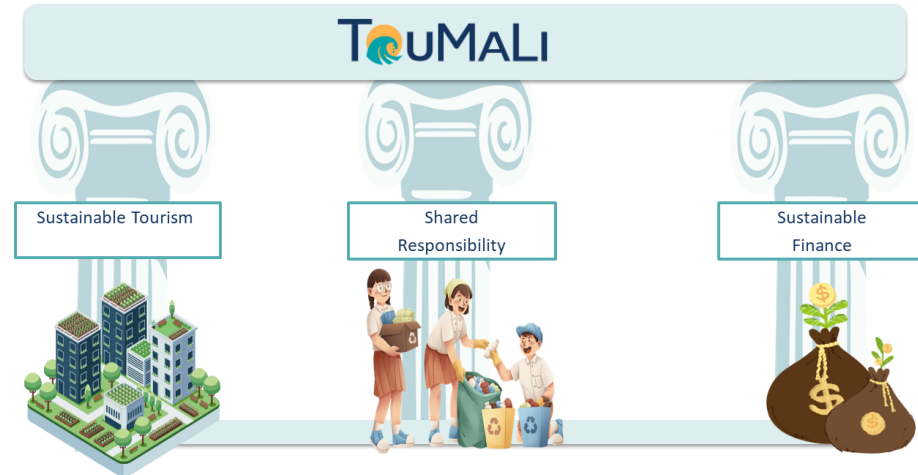
*TouMaLi 2025: Project Insights and Forward Paths on Sustainable Tourism, Waste Solutions and Litter Prevention*

Hammam Sousse, 26th and 27th November 2025

Christophe Pautrat – Chief Operating Officer – Landbell Group

## Function/ role in the project

- Lead **finance solutions** topics and **EPR** topics
  - Capacity building
  - Supporting development and implementation of pilot projects on financing topic
  - Development of a sustainable financing system and EPR system
- Main objective: financial sustainability of technical solutions during and post pilots



## Several workshops have been conducted

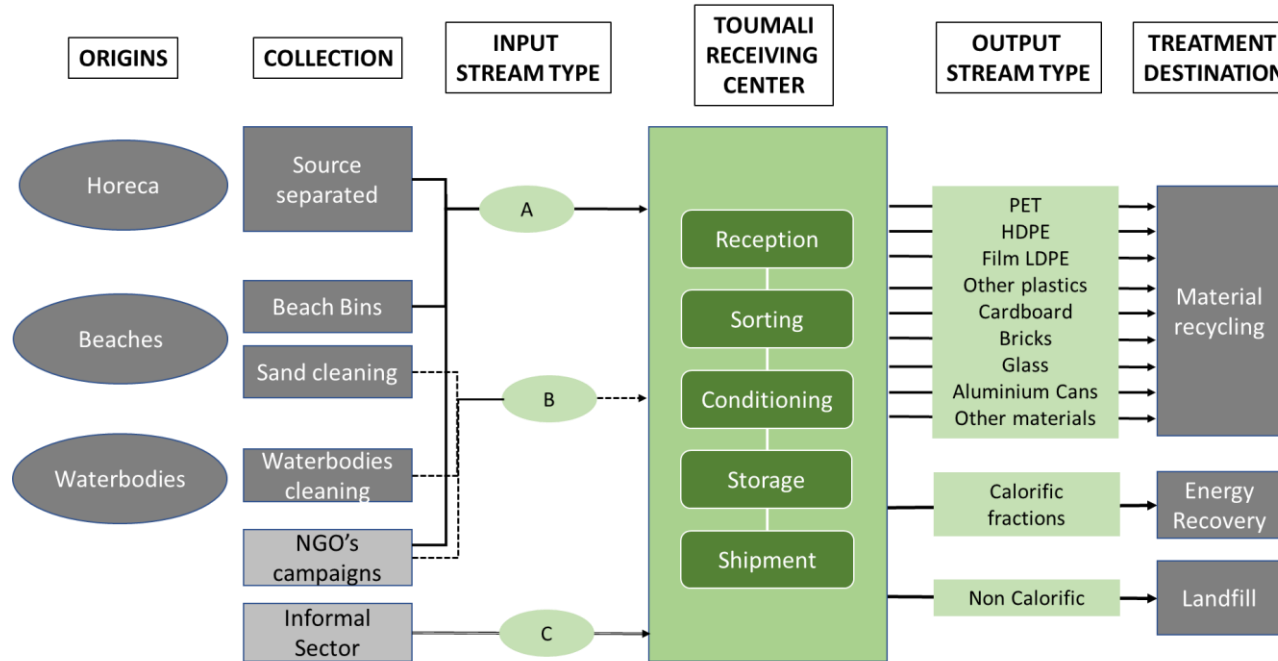
### ▪ EPR

- Tunisia: 2022
- Egypt: 2022
- Morocco: 2023

### ▪ E-registry

- Tunisia 2024
- Egypt 2025

# Pilot project financing models



# Pilot project financing models

## Financing models of pilot operations has been developed

	Moyenne kg par jour	Ton entrée par an	ton entrée		ton recyclées		Refus de
			ECOLEF	HORS ECOLEF	ECOLEF	HORS ECOLEF	
MAT. ECOLEF	1.795	655	634	22	582	0	52
LDPE	475	173	173	0	147	0	26
PET	824	301	301	0	286	0	15
HDPE	127	46	32	14	31	0	2
Other plastic	53	19	12	8	6	0	
Tin/Alu	317	116	116	0	117	0	
Papier Carton	1.795	655					
Verre	211	77					
Autres	422						
total							

Tri/presse  
Carrieste  
chef de c

### Prix reprise - qualité 1.01 Papiers-Cartons mêlés triés

	€/ton	TND/ton
moyenne 2 dernières années	53	165
moyenne 3 dernières années	66	207
moyenne 5 dernières années	44	137
<b>90% moy 5 dernières années</b>	<b>40</b>	<b>123</b>

	Tonnes recyclées		Tarif Ecolef (TND)	Recettes annuelles (TND)	Amortissement par tonne (TND)	Tarif sans Amortissement (TND)	Recettes Annuelles sans Amo (TND)
	ECOLEF	HORS ECOLEF					
LDPE	108.535	29.653	138.188	19.903	28.470	48.372	186.560
PET	128.438	58.123	186.560	3.124	4.076	7.200	37.975
HDPE	19.903	28.470	48.372	7.979	10.409	18.387	34.999
Other plastic	128.438	58.123	186.560	3.124	4.076	7.200	37.975
Tin/Alu	128.438	58.123	186.560	3.124	4.076	7.200	37.975
SOUS-TOTAL	128.438	58.123	186.560	3.124	4.076	7.200	37.975
ELECTRICITÉ PRESSES	3.124	4.076	7.200	37.975	54.421	92.396	7.979
DIESEL	37.975	54.421	92.396	7.979	10.409	18.387	34.999
CONSUMIBLES	7.979	10.409	18.387	3.124	4.076	7.200	37.975
MAINTENANCE	3.124	4.076	7.200	37.975	54.421	92.396	7.979
PERSONNEL	37.975	54.421	92.396	7.979	10.409	18.387	34.999
GESTION REFUS DE TRI	7.979	10.409	18.387	3.124	4.076	7.200	37.975
FRAIS GÉNÉRAUX	10.925	14.873	25.798	1.879	2.747	4.626	10.925
TRI Sans Amo	100.004	136.261	236.265	26.923	37.202	64.125	126.927
AMO	26.923	37.202	64.125	126.927	173.463	300.390	208.535
Tri avec Amo	208.535	165.914	374.453	46.826	65.672	112.497	255.365
TOTAL COÛTS sans Amo	208.535	165.914	374.453	46.826	65.672	112.497	255.365
Total Amo	46.826	65.672	112.497	255.365	231.583	486.950	299.634
TOTAL COÛTS avec Amo	255.365	231.583	486.950	299.634	79835	379469	91.095
REVENUS	299.634	79835	379469	91.095	-86.079	5.016	44.269
Superavit/Déficit sans Amo	91.095	-86.079	5.016	44.269	-151.750	-107.481	70 TND
Surplus/Déficit avec Amo	44.269	-151.750	-107.481	70 TND	-167 TND	-70 TND	

# Development of EPR

- Initial **baseline assessment**
- Identification of action possibilities
  - Dependent on the EPR status quo in each country



# Initial baseline assessment Egypt

- In **Egypt**, Law 202 of 2020 on Waste Management establishes the principle of EPR
- Related Executive regulations have been published
- Public sector-led EPR (WMRA)
- Enforcement is pending a Prime Minister's Decree to implement ERP on specific products and producers
- ✓ Products of interest include packaging and single-use plastics
- Update
  - Prime Ministerial Decree for single-use plastic shopping bags published





# Initial baseline assessment Morocco

- In **Morocco**, Law 28-00 on waste management and disposal under review
- The intention is to include, inter alia
  - ✓ Introduce waste hierarchy
  - ✓ Adopt waste segregation at the source
  - ✓ Promote waste recovery
  - ✓ Divert waste from landfill
  - ✓ Establish EPR principle
- Update: EPR will likely be producer-led EPR via PROs established by producers





# Initial baseline assessment Tunisia

- In **Tunisia**, Law 96-41 of 1996 on waste management and disposal does not explicitly mention an EPR-like concept
- ✓ The Decree 97-1102 of 1997 establishing **conditions** for packaging waste management clearly describes the principles of EPR
  - Producers of packaged products and bags must either collect and manage their waste or outsource this activity to a licensed company or join the public system “Ecolef”
- Updates
  - The draft Environment Code explicitly mentions and describes EPR should be soon be submitted to the Assembly of the Representatives of the People for adoption
  - ANGED had been evaluating a redesign of the EPR system in Tunisia

- No EPR regulatory framework could be considered complete in the region
  - Some have yet to be drafted
  - Some have to be completed
  - Some have to be overhauled



- **Data collection** systems provide visibility for planning and monitoring
  - **Producer registry** for identification and reporting of products entering the market
  - Operations **fulfilment reporting**



# Customs study - Tunisia

- Extraction, processing, and analysis of sectoral customs data
- Product categories affected:
  - Beauty products (perfumes, cosmetics)
  - Cleaning products (soaps, surfactants)
  - Plastic and/or metal packaging of other cleaning products subject to TPE
- Assessment of Imported Quantities and Values
  - Imported products: perfumes, hair products, hygiene preparations
- Assessment of potential impact on EPR funding
- Training ANGEd team on the Registry system



# EPR system modelling - Egypt

- Proposing EPR **operating model for single use plastics**
- **PPP approach**, involving private sector in support of WMRA
- Training WMRA team on the **Registry system**

# Features of a registry function

- **Registration**  
**with national register** to demonstrate awareness and indicate compliance
- **Regular Reporting of producers**  
(monthly, quarterly and/or annually)  
of **volumes put on market** e.g. mass and material to:
  - Authority/Register and/or
  - Producer Responsibility Organization (PRO°)→ enabling PRO / authorities **to calculate the producers' take-back obligation** and assign shared cost
- **Regular Reporting of waste operators**  
(directly or via PRO)

## Example Germany:

### 6.1 What does producer reporting include?

Producers / initial distributors have to submit all the information about packaging that they provided to the system they participate in to the Zentrale Stelle Verpackungsregister (Central Agency Packaging Register – ZSVR) without delay. These are:

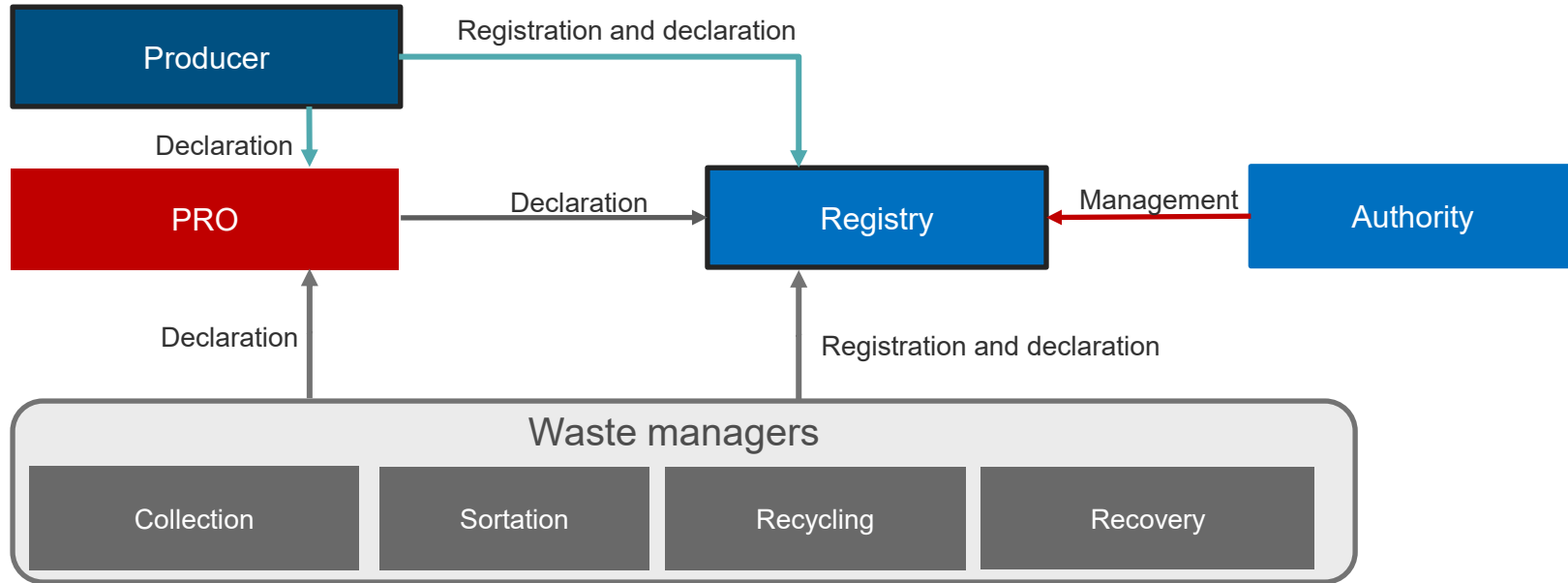
- registration number;
- material type and mass of the participating packaging;
- name of the system in which the packaging participates;
- period of system participation.

A producer is required to enter into a contract with a system ("participate in a system") regarding the packaging mass that the producer is planning to place onto the German market. At the same time, the exact volumes that the producer reported to the system also need to be submitted to the ZSVR, by entering the information into the LUCID Packaging Register.

Source: <https://www.verpackungsregister.org/en>



# Registry – data flow

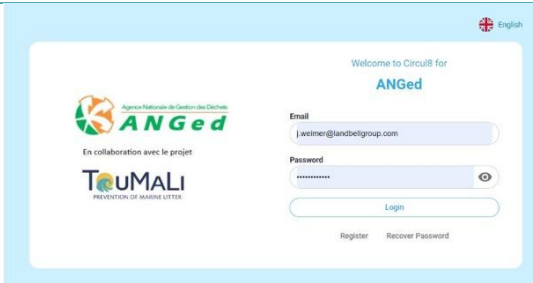


- Define and implement a registry system
- Customisation of our **Circul8 software** according to pilot needs (however software is scalable)
  - Focus on packaging materials
  - Producer registration function
  - Producer declaration function
  - Access to data according to roles and permissions (“need to know basis”)
    - Publicly available data: producer names, brands
    - Restricted access data: sales volumes per producer
  - Waste operator registration
  - Waste operator reporting of collection and treatment of waste
- **Training** and **go-live**



# A differentiated approach

## Tunisia



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**ANGED**

Email  
| weimer@landbellgroup.com

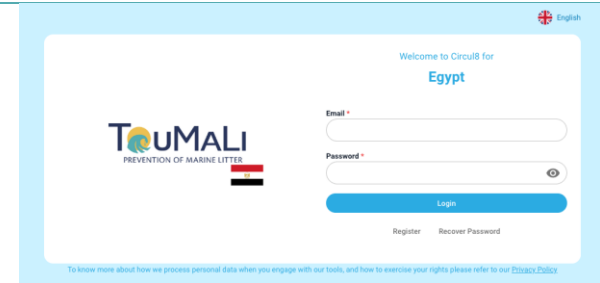
Password  
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Login

Register Recover Password

- System delivered in 2024
- Focus on registration and declarations of producers
- Identification of **actual producers** participating in the public system ECO-Lef
- Training session of producers

## Egypt



Welcome to Circu8 for  
**Egypt**

Email \*

Password \*

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Register Recover Password

To know more about how we process personal data when you engage with our tools, and how to exercise your rights please refer to our [Privacy Policy](#)

- System delivered in 2025
- Focus on Pilot area
- Registration and declarations of **participating hotels** (acting as “producers”)
- Registration and declarations of participating waste operator

# Registration stage

- Company name
- Company VAT Number
- Company corporate registration number
- Country
- Postal address
- Contact person details
- Legal representative details
- Materials and brands placed on the market
- Registration date (once completed)
- Registration number (once completed)

The screenshot displays the registration form for TOMALI, showing the first two steps: 'Registration - landing page' and 'Registration - Categories-Hierarchies Company Information'. The 'Company name and type of company' section includes a text field for 'Company name' (with a placeholder 'Please enter the full legal name of your company') and a dropdown for 'Company sub type' (with a placeholder 'What kind of company are you?'). The 'Fiscal Information and other IDs' section includes text fields for 'Tax number', 'VAT number', and 'External ID' (with a placeholder 'Enter your external ID if available'). The 'Company address' section includes a dropdown for 'Country' (set to 'Tunisia'), and text fields for 'Street' (placeholder 'Please enter the street name'), 'Number' (placeholder 'Please enter the number'), 'Address supplement', 'Zip Code' (placeholder 'Please enter the postal code'), and 'City' (placeholder 'Please enter the city'). There is also an 'Additional address (if needed)' dropdown (set to 'No') and a 'Comment' text area.

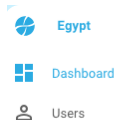
# Registry – Product data structure

Category	Sub Category
<b>Plastics</b>	<ul style="list-style-type: none"> <li>PET for bottles</li> <li>HDPE for bottles</li> <li>Other rigid plastics (including PET trays and other HDPE applications)</li> <li>Mono-material flexible plastics</li> <li>Multilayer flexible plastics</li> </ul>
<b>Paper / cardboard</b>	<ul style="list-style-type: none"> <li>Paper / cardboard</li> <li>Beverage cartons</li> </ul>
<b>Metals</b>	<ul style="list-style-type: none"> <li>Ferrous metals</li> <li>Aluminium</li> <li>Other non-ferrous metals</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>Glass</li> <li>(wood, ceramics...)</li> </ul>





# Declaration stage



Welcome to Circul8 for Producer Management

Registration statistics

## Declarations (approved)

SELECT A FLOW default									
id	state	Period Name	Company Name	Period Start Date	Period End Date	Period Edit Start Date	Period Edit End Date	user	actions
	Search X	Search place X	Search place X	Search place	Search place	Search place	Search place		
114272	APPROVED	Q1 / 2025 / Put ...	Aifu Resort - El Mon...	01.01.2025	31.03.2025	01.02.2025	30.04.2025	gasse...	
114235	APPROVED	Q1 / 2025 / Put ...	Helnan Royal Palest...	01.01.2025	31.03.2025	01.02.2025	30.04.2025	gasse...	
114212	APPROVED	Q1 / 2025 / Put ...	Hilton Kings Ranch	01.01.2025	31.03.2025	01.02.2025	30.04.2025	gasse...	
114111	APPROVED	Q1 / 2025 / Put ...	Radisson Blu	01.01.2025	31.03.2025	01.02.2025	30.04.2025	gasse...	
113988	APPROVED	Q1 / 2025 / Put ...	Romance	01.01.2025	31.03.2025	01.02.2025	30.04.2025	gasse...	
81582	APPROVED	Q1 / 2025 / Put ...	Sunrise Hotel Alexa...	01.01.2025	31.03.2025	01.02.2025	30.04.2025	gasse...	
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# Conclusion

- Both in Egypt and in Tunisia, WMRA and ANGED have now access to a system able to
- **Prepare** producers to registration requirements
- **Train** participants
- Provide useful **data** and **collect feedback**
- **Support of EPR modelling and operationalization** can be further provided to all 3 countries until end of project