















A project labelled by the UfM



LANDBELL GROUP











Third International TouMaLi Conference TouMaLi Project in Egypt: Presentation of key results and outcomes



Hammam Sousse, 26th and 27th of November 2025

Prof. Alaa Abd El Bary, Team leader and Vice President, AASTMT, Prof. Gasser Hassan, Local Project Manager, TouMaLi Egypt, AASTMT

Mr. Ahmed Tawfik, R&D Manger, Nahdet Misr Co. & Steering Committee Members, Egypt

Contents



- **Review of Main Objectives/Outcomes & Activities**
- Results and Outcomes for each Work package:
 - WP I: Coordination, networks, pilot areas and background data analysis
 - WP II: Concepts for waste and marine litter reduction and mitigation
 - WP III: Development of EPR concept for the benefit of tourism sector at national level
 - WP IV: Monitoring, quantification and tools
 - WP V: Implementation of local waste reduction solutions
 - WP VI: Dissemination, awareness raising and capacity building























Main Objectives & Activities

- Main Objective: Reducing the marine littering from tourism sector by 60% in the Mediterranean region
- The expected outcome/Impact: Complete Sustainable solution/model to establish
 opportunities for new industry, business and jobs creation based on waste from
 coastal tourism sector.
- The project will be applied in 3 south Mediterranean countries, Egypt, Tunisia and Morocco.
- The project activities will be applied by local partners (AASTMT in Egypt) with local stackholders, including the Ministries of Environment, Tourism, local development in addition to Hotels, Associations, NGOs, local comunities.
- AASTMT as the local partner in Egypt is considered the focal point of the project to establish a communication channel to involve all the local stackholders in the project activities satisfying the project objectivies and goals.





















Work Packages Overview



WP I: Coordination, national networks, pilot areas & background data analysis

- Establishment of national networks in each partner country
- Pilot site selection
- Data collection

WP II : Concepts for waste & marine litter reduction and mitigation

- Financial , technical & policy concept
- Institutional framework
- Industry & stakeholder engagement

WP III: Development of EPR concept for the benefit of tourism sector at national level

- Definition of challenges and stakeholders
- Design of an EPR-setup
- Workshops for stakeholders & cooperating partners

WP V: Implementation of local waste reduction solutions

- Separation at source
- Technical solutions to avoid littering & landfilling
- Trainings on waste reduction
- Local measures and efficient upcycling

WP IV: Monitoring, quantification & tools

- Monitoring concept
- · Beach and underwater pollution assessment
- Emission source identification
- Spatial pollution analysis

WP VI: Dissemination, awareness raising & capacity building























WP I: Coordination, networks, pilot areas and background data analysis























WP I: Coordination, networks, pilot areas and background data analysis

Evaluation and identification of pilot areas

Alexandria is selected to be the pilot area (the most populated city on the Mediterranean (about 6 Millions) with high rate of local and international tourism activities.

- The network has been established and the steering committee for TouMaLi-Egypt includes all the stakeholders and partners, steering committee meetings are held to follow up the implementation of the project activities and solutions:
 - Dr Ali Abo-Sena (Head of Egyptian Environmental Affairs Agency (EEAA), Ministry of Environment),
 - Dr Sameh Reyad (Head of (EEAA), Alex. and west Delta Branch, Ministry of Environment
 - Mr. Abdulwahab (Ministry of Tourism, Alex. Branch),
 - General Ahmed Ibrahim Dr Mohamed Abdel-Razak (Alexandria Governorate, Beach management),
 - Mrs. Hanan Wefky from (Hotels Association),
 - Mr. Ahmed Tawfik (Nahdet Misr Company for waste management in Alexandria),
 - Mr Yasser Abdullha Dr Tarek El-Araby (CEO, WMRA, Ministry of Environment)
 - Prof. Alaa Abdel-Bary (Local Team Leader, TouMaLi)
 - Prof. Gasser E. Hassan (Local Project Manger, TouMaLi)

















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Implementation of local waste reduction solutions























WP V: Implementation of local waste reduction solution solution



TouMaLi Company establishment (Jan 2025)

The first meeting for the company board was Thursday 16th January 2025 and the company is formally active and registered for operation. The paper work of the company license for work permits will be submitted to WMRA after the local authority approval for environmental study by Alexandria governate. The Company name is "Arab Renaissance Company for Environmental **Solutions and Innovation**" (51% AASTMT: 49% Nahdet Misr)































TouMaLi Center-Alexandria/ Equipment



Site Preparation:

<u>Construction Work:</u> The construction work has been completed with Health & safety equipment installed

























TouMaLi Centre-Alexandria/ Equipment



Electromechanics Work:

<u>Electrical works</u> including providing the electrical supply for the equipment is and the presses are installed at the centre The online training session for presses operation was performed to explain the main requirements to start operation The on-site training session for presses operation was performed by HSM agent.

Mechanical works the new sorting belt is delivered and installed.



























TouMaLi Center-Alexandria/ Equipment



Presses (HSM German supplier)

Installed and the training is performed.

Bins (ESE German supplier)

We have the bins and the foot-opening mechanisms (for both 120 L and 240 L bins) are received and they are ready for distribution to the hotels once contracting and starting the operation.





























TouMaLi Center-Alexandria/ Equipment



Forklift (Mitsubishi Local supplier)

We received the Forklift at AASTMT storage department and will be transferred to the sorting centre.

Beach cleaning Machines:

The 2- machines have been received and the training for 4 labours has been conducted in 3 beaches.



































TouMaLi Centre-Alexandria/ Equipment



Trucks:

The 3 Trucks has been delivered and the truck licenses are issued recently on the name of the new company with the help of our partner NAHDET Misr team.

























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WP V: Implementation of local waste reduction solution March 2023 Orientation Workshop for Hotels, March 2023

- The first orientation workshop for hotels in Alexandria has been held on 11th March 2023
- About 22 hotels is invited with the cooperation of the Ministry of Tourism.
- Very effective discussion regarding the challenges and the solutions.
- Organizing a Tour for the most modern WMS in Sunrise hotel (5 stars with ECO Tourism Certificate)





























Lesson Learned and exit Strategy for Company Operation with Hotels

- The hotel staff is one of the key elements to guarantee the quality and quantity of the separated streams and hence the sustainable fanatical operation of the company. They should be included in the operation process as a pre-sorters by incentives or rewards to be sure that all the waste/recyclable will be handled by the compony.
- An effective monitoring system should be developed in order to guarantee the smooth operation of the company with monitored quantities and quality and evaluate the performance of each element in operation chain and increase the operation efficiency of the company.





















WP IV: Monitoring, quantification and tools



The beach campaigns cover 6 beaches in Alexandria and 2 in Maras Matrooh.

During the high season, (summer) The manual cleaning activities are done continuously during the day with 2 main cleaning actions every 12 hours at the morning time and the sunset time.

The campaigns are conducted early in the morning before the morning cleaning activity.





























Conducted Beach monitoring Campaigns



The primary results show that:

As expected for high season with continuous cleaning activities, all the beaches are low polluted except one public beach which can be classified as a moderate polluted beach.

The sand rack method is used in all the low polluted beaches since there is no waste with large size.

Cigarette butts are the most commonly waste found in the sand rack method analysis.

In general, the primary analysis for the high season shows a values less than 30% - 20 % of the values recorded during the off season (March period – 6 months without cleaning).





























Lesson Learned and exit Strategy for beach monitoring/cleaning



- Standard methodology for beach monitoring /cleaning / waste management for beach operation is required to be recommended to ministry of environment and local authority.
- The cost of monitoring/cleaning of both the small and large scale waste should be included in the budget of the operation of WM for beaches.
- The level of accepted small-scale waste pollution in sand beach should be identified for the local authority to evaluate the beach condition and level of beach pollution/cleanness.
- The level of sand beach pollution from small scale waste can be used to identify the classification of the beach by the local authority.
- Obligations on the beach operators should be implemented to perform a professional fine cleaning for small scale waste in the sand not only the general cleaning.
- The pollution monitoring for sand beaches should be a continues process by a trained staff according to standard methodology to guarantee the accepted performance for waste management operation to help the ministry of environment and local authorities in decision making.























WP VI: Dissemination, awareness raising and capacity building





















WP VI: Dissemination, awareness raising and capacity building

TOUMALI PREVENTION OF MARINE LITTER

TouMaLi 1st International Conference, Oct 2022, Alexandria, Egypt

Title: "Contribution of effective waste management systems to sustainable tourism and the protection of marine ecosystems"

Time: 10-11 Oct 2022

Location: AASTMT Main Campus, Abo-

Quir, Main Hall

Website: A part from the project website

https://toumali.org/en/international-toumali-conference-2022

Agreement on a joint statement about

- Improve the institutional and legal frameworks on the MENA Region,
- Extended Producer and Consumer Responsibility,
- Sustainable operations and circular economy





















WP VI: Dissemination, awareness raising and capacity building TouMaLi 2nd International Conference, Nov 2022, Marrakech,



<u>Morocco</u>

Title: "Effective Waste Management for Sustainable Tourism and Marine Ecosystem Protection"

Time: 8-9 Nov 2022

Location: Cadi Ayyad University -

Marrakech, Morocco

Website: A part from the project website

https://toumali.org/en/international-toumali-conference-2023

Signing of Voluntary Commitment of Hotel
Associations and Federations on Effective
Waste Management for Sustainable Tourism and
Marine Ecosystem Protection























WP VI: Dissemination, awareness raising and capacity building Beach monitoring training Campaign with WMRA October 2022

























WP VI: Dissemination, awareness raising and capacity building

TouMaLi Participation in COP 27, Nov 2022, Sharm Elsheikh, Egypt

Two Participations in the COP27

One in the BLUE Zone and the other in the GREEN Zone

Reduction of single-use plastics bags consumption in Egypt, strategy and expected outcomes

Saturday, November 12th 2022, 14:00 – 15:00 (Cairo time) COP27 venue, Blue zone, Egypt Pavillon

Convened by the Ministry of Environment of the Arab Republic of Egypt In technical partnership with Roland Berger















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WP VI: Dissemination, awareness raising and capacity building



TouMaLi Participation in COP 27, Nov 2022, Sharm Elsheikh, Egypt

GREEN Zone

Raising the African coordination and awareness on waste to reduce effects on natural ecosystems

UNFCCC COP27 – Sharm El-Sheikh, Egypt Wednesday, 16th November 2022 Green zone, Hall A at 17:00 – 18:00 (Cairo Time)



Presentation Title: TouMaLi Project
German African Mediterranean
Cooperation Toward Prevention of Marine
Litter























TOUMALI PREVENTION OF MARINE LITTER

WP VI: Dissemination, awareness raising and capacity building Hotels Competition for Environment and Sustainable Tourism, May-June 2023

• The first hotel competition for Environment and Sustainable Tourism in Alexandria.

 The competition announcement was early May 2023 and 14 out of 45 hotels asked for participation covering different grades/categories/classes of the hotels from 5 to 2 stars, luxury, resorts, city hotels and low budget business hotels.

The evaluation Committee includes representatives from Ministry of Environment, Ministry of Tourism, Nahdet Misr Company, Arab Academy/TouMaLi project. The evaluation Committee visited the hotels by

the end of May/early June.

























WP VI: Dissemination, awareness raising and capacity building

Hotels Competition for Environment and Sustainable Tourism, May-June 2023

- The Evaluation Criteria are as follow:
- 1- Separation from Source and different separated streams
- 2- Staff periodic and continuous training for waste management and separation
- 3- Ensuring the safe disposal for the produced waste
- 4- Having a Green or Eco Certificates





























Participation in World Environment Day - 5th June 2023 TOWN ALLI

TouMaLi is invited to participate in the World Environment Day celebration at Alexandria Bibliotheque, 5th June 2023.

The minster of Environment attended the event which is organized by the ministry

of Environment

























Participation in World Environment Day - 5th June 2023 JUNE 2023 PREVENTION OF MARINE LITTER

TouMaLi presented the project objectives, tasks and activities during the World Environment Day celebration in front of the Minister of environment (Dr. Yasmin Foaad).

• The awards of the 1st annual hotels competition for Environment and Sustainable Tourism in Alexandria organized by TouMaLi are announced during the World Environment Day Events. Thirteen hotels out of 45 hotels are awarded the Award of Excellence



























World-Cleanup Day (16th September 2023)



































World-Cleanup Day (16th September 2023)

















































































































































Beach Competition



The competition was organized this summer between different beaches with different categories to evaluate them regarding the WMS.

We met the Alexandria Governor to confirm about the competition and we get the approval.

Beach Competition is organized between 16 beaches in Alexandria regarding evaluating the waste management system for the different types of beaches (Public or Hotel Beaches).

6 public and 4 hotel beaches are awarded the price. The announcement for the results of the evaluation will be very soon after coordination with Ministry of Environment and Alexandria Governerate.





















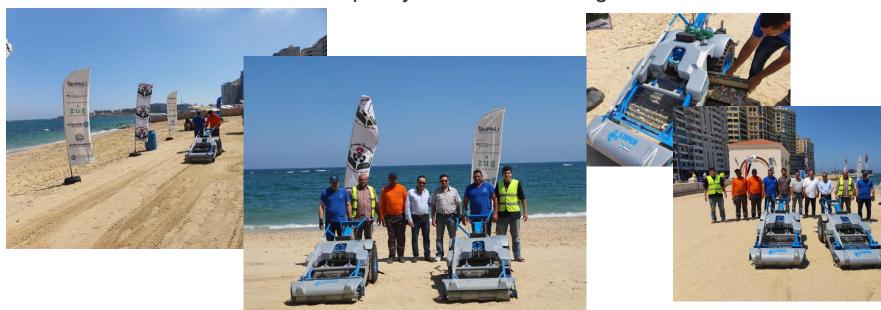






Participation in the visit of the Egyptian Parliament Local Development Committee

The visit of the Egyptian Parliament Local Development Committee was last Friday 27th June 2025 to Alexandria beaches and TouMaLi project participated by the Beach cleaners to show how quality of beach cleaning can be achieved.



























WP III: Development of EPR concept for the benefit of tourism sector at national level





















WP III: Development of EPR concept for the benefit of tourism sector at national level



Development of the Extended Producer Responsibility (EPR) is one of the main Work Packages for TouMaLi Project

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WP VI: Dissemination, awareness raising & capacity building























Organisational Structure for Egypt EPR Pilot



University of Rostock (UR) ----- (PI and Coordinator for TouMaLi Project)



Arab Academy (AASTMT) -----(Local Project partner Responsible for EPR implementation in Egypt)



Landbell Group ----- (EPR developer for TouMaLi project)



Blackforest Solutions GmbH ----- (Waste management activities consultancy)



























WP III: Development of EPR concept for the benefit of tourism sector at national level

- Conduction of workshops for all the stakeholders and cooperation partners to present the Extended Producer Responsibility (EPR) concept and adjustment needed including for pilot design
- Three workshops have been organized with WMRA to discuss the EPR concept and the challenges regarding the EPR implementation.























WP III: Development of EPR concept for the benefit of tourism

sector at national level

 TouMaLi team developed a draft PRO business plan for WMRA to be applied for the single use plastic bags which is the first step in EPR implementation.



















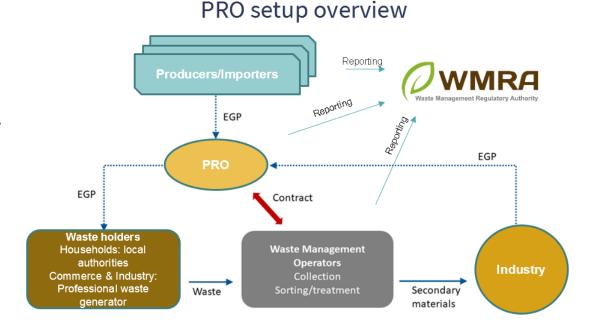






WP III: Development of EPR concept for the benefit of tourism sector at national level

 Two EPR models are proposed by TouMaLi team to be applied in case of implementation of the EPR concept or if it is not active.





















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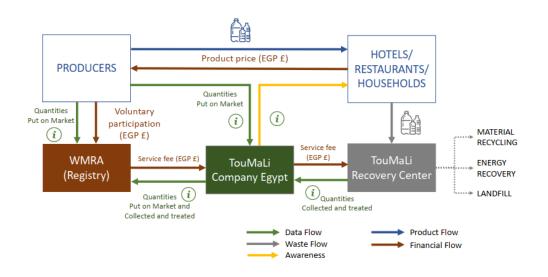




TOUMALI PREVENTION OF MARINE LITTER

sector at national level

 TouMaLi-Egypt get the approval from WMRA to implement the suggested EPR concept in the region of Alexandria as a pilot project































EPR Pilot Alexandria TouMaLi EPR Workshop with WMRA - (27-28 Jan 2025)



The workshop was held at the AASTMT main campus for the 2 days.

Attendee;

WMRA, Ministry of environment, Ministry of Tourism, Alexandria governate, Nahdet Misr

TouMaLi Team: Landbell, Blackforst, University of Rostock, Arab Academy

- Implementing the EPR pilot system for the Tourism sector in Alexandria is discussed.
- Circul 8 system for registration and decleration is presented by Landbell team



















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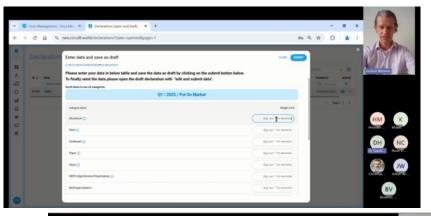


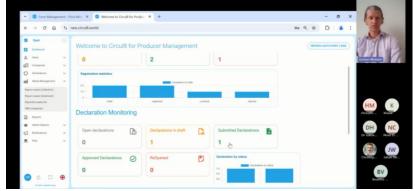
EPR Pilot Alexandria



Circul8 platform online Training - (25 Feb 2025)

- Circul8 platform is customized by Landbell team to fit the requirements of the EPR pilot in Alexandria.
- A primary data is collected from 2 hotels according to their purchasing list and quantities for the packaging of different products and brands to calculate different packaging waste categories put on the market.
- Online training is provided by Landbell team to WMRA, Arab Academy, and Nahdet Misr teams, ensuring effective use of the customized Circul8 platform in line with Egypt's EPR framework.
- The training included the input data and accurate reporting for registration, declaration and approval for the producers (as materials put on the market), waste management companies (collection and treatment) and PRO for approval.



























Preparation for EPR Implementation in Alexandria as a Pilot



Area (As producers side)

ToumaLi team designed a matrix to collect data from hotels to be the input data to the EPR system for the pilot area in Alexandria for the Tourism sector (As producers side)

- Three simple separate forms are redeveloped in Arabic and distributed to the hotels to help the staff during the data entry of the packaging types/quantities put to the market.
- The 3 separate simple forms are for Food and Beverage products, Personal Care products, Cleaning staff products.
- The forms are distributed through Ministry of Tourism to collect the data for the first quarter.

Hotel Name:

البضائع المشتراة وانواع المخلفات الناتجة عن التغليف:

List and Quantity of Purchased Goods for Hotels and Types of Packaging Waste Generated

1- Product Category (Food and Beverage)

الاغذية و المشروبات

Water, Soft drinks, Juices, Milk, Other beverages- Oil, Vinegar, Salt, Sugar, Other condiments - Meat, Fish, Eggs, Vegetables, legumes, Fruits, Bread, Rise, Other cereals, Pasta, Cheese, yoghurt and other dairy products, Other foodstuffs

العياة العمدنية – العشرويات الغازية – العصائر- الالبان – مشرويات اخرى – زيت – خل – ملح – سكر – نوابل – لحوم – سمك – فراخ – بيض – خضار – فواكة – خيز – رز – حبوب – مكرونة – جين – نبادى – منتجات التخذية اليومية – اى نوع اخر من الاغذية و المشروبات

Paper &Cardboard, Beverage	نوع العبوة Can, Tin, Bottle, Cartons, Aerosol, Bags, Pouches شنه, Sachets(في جورات صنير) , Tube, سلة Jar, Net, Boxes, Tray, Punnet سلة Jar, Net, Boxes, (Tay, Punnet) مشيرة (شول) (Jim, Sack (Jarge bags) (المشيرة المشيرة ال	هل يتم اعادة ملئ العبوة Refill او اعادتها الى المورد	متوسط الكمية الكلية الشهرية (عدد العبوات)	حجم العبوة الواحدة Litre, kg Unit	اسم Brand	نوع المنتج

Hotel Name:

البضائع المشتراة وانواع المخلفات الناتجة عن التغليف:

List and Quantity of Purchased Goods for Hotels and Types of Packaging Waste Generated

2- Product Category (Personnel care and hygiene)

منتجات العناية الشخصية

Bar soap, Liquid soap, Shampoo, Tissues, Toilet paper, Shaving cream, Razors, Toothpaste, Toothbrush, Other personal are and hygiene products

قطع صابون – صابون سائل – شامبو – مناديل – ورق مناديل توليت - كريم حلاقة – ماكينة حلاقة – معجون اسنان – فرش اسنان – ادوات العناية الشخصية الاخرى

Paper &Cardboard, Beverage cartons (Tetra pack), Metal, Others	نوع العيوة Can, Tin, Bottle, Cartons, Aerosol, Bags, Pouches مثينة, Sachets(معولت صغيرة), Tube, سلة Jar, Net, Boxes, Tray, Punnet سلة را (عول Film, Sack (large bags), صغيرة	هل يتم اعادة ملئ العبوة Refill او اعادتها الى المورد	متوسط الكمية الكلية الشهرية (عدد العبوات)	حجم العبوة الواحدة Litre, kg Unit	اسم Brand	نوع المنتج

Hotel Name:

لبضائع المشتراة وانواع المخلفات الناتجة عن التغليف:

List and Quantity of Purchased Goods for Hotels and Types of Packaging Waste Generated

3- Product Category (Cleaning Products)

منتجات التنظيف (المنظفان

Glass Cleaner, All-Purpose Cleaner, Carpet Cleaner, Bathroom Cleaner, Furniture Polish, Disinfectant sprays, tablets, Air Fresheners, Dishwashing Liquid, Oven and Grill Cleaner, Laundry Detergents, Bleach, Other cleaning products

منظف الزجاج - منظف متعدد الاستخدامات - منظف السجاد - منظف الحمامات - ملمع الاثاث - سبر اى مطهر – اقر اص و معطر الهواء - ساتل غسالات الاطباق - منظف الفرن و الشواية - سوائل و مسحوق الفسيل - منظف التيرينس - منظف الغرن و الشواية -

نوع مادة العبوة Plastic rigid, Plastic film Paper &Cardboard, Beverage cartons (Tetra pack), Metal, Others (glass, wood, ceramics)	نوع العيوة Can, Tin, Bottle, Cartons, Aerosol, Bags, Pouches (عبوات سخيرة, Sachets(قرات سخيرة) , Tube, تا عوتات سطة Jar, Net, Boxes, Tray, Punnet , الوعية سلة, Film, Sack (large bags) (شول)	هل يتم اعادة ملئ العبوة Refill او اعادتها الى المورد	متوسط الكمية الكلية الشهرية (عدد العبوات)	حجم العيوة الواحدة Litre, kg Unit	اسم Brand	نوع المنتج	





















Preparation for EPR Implementation in Alexandria as a Pilot

T@uMali

Area (As producers side)

Product Category Product Category Product Category		roduct type Brand f		Size per unit (content in liters, kilos, grams, pieces)	Main packaging material (2)	Average number of units purchased per month	
ood and beverage	W ater	Nestla	Bottle	0,33 l	Plastic rigid	10000	
ood and beverage	S oft drinks	Cola	Can	0,33 l	Metal	3000	
ood and beverage	Juices	Johina	Cartons	11	Beverage cartons	500	
ood and beverage	Juices	Lamar	Cartons	11	Beverage cartons	500	
ood and beverage	Milk	Maraie	Cartons	11	Beverage cartons	5000	
ood and beverage	Oil, Vinegar	oifxa	Bottle	4.5 L	Plastic rigid	100	
ood and beverage	Oil, Vinegar	Heinz	Bottle	11	Plastic rigid	100	
ood and beverage	Salt, Sugar	Cooks	Bottle	0,7 kg	Plastic rigid	250	
ood and beverage	Salt, Sugar	Doha	Sachets	1 kg	Plastic film	1500	
ood and beverage	Other condiment	Heinze	Can	piece	Metal	60	
ood and beverage	Other foodstuffs	Harvest	Tin	piece	Metal	700	
ood and beverage	Pasta	Maleka	Bags	1 kg	Plastic film	150	
ood and beverage	Rise	Doha	Bags	5 kg	Plastic film	400	
ood and beverage	Cheese, youghou		Tub	piece	Plastic rigid	6000	
ood and beverage	Other cereals	5 stars	Bags	5 kg	Plastic film	1500	
ood and beverage	Cheese, youghor	Halwani	Jar	piece	Others (glass, wood, ceramics,	150	
ood and beverage	Meat	Amal	Bags	kg	Plastic film	1200	
ood and beverage	Meat	Amir	Bags	Kg	Plastic film	3500	
ood and beverage	Fish	Sheraton	Bags	Kg	Plastic film	700	
ood and beverage	Eggs	Golden Eg		30 eggs	Paper&Cardboard	9000	
ood and beverage	Cheese, youghor			Kg	Plastic film	500	
ood and beverage	Vegetables, legu		Bags	Kg	Plastic film	2000	
ood and beverage	Vegetables, legu		Bags	Kg	Plastic film	2500	
ood and beverage	Vegetables, legu			5 Kg	Paper&Cardboard	1000	
ood and beverage	Fruits	Dewdar	Boxes	5 Kg	Paper&Cardboard	1000	
ood and beverage	Bread	Elhamd	Sack	5 piece	Paper&Cardboard	5000	
ersonel care and hygiene		Orient	Sachets	piece	Plastic film	500	
ersonel care and hygiene		Orient	Jar	piece	Plastic rigid	500	
ersonel care and hygiene		Orient	Jar	piece	Plastic rigid	500	
	Tissues	fresh	Boxes	24 piece	Paper&Cardboard	50	
ersonel care and hygiene		fresh	Boxes	24 roll	Paper&Cardboard	100	
ersonel care and hygiene		Orient	Tub	piece	Plastic rigid	500	
ersonel care and hygiene		Orient	Tub	piece	Plastic rigid	30000	
Cleaning	Air Fresheners	soom shoo		piece	Metal	50	
leaning	Glass Cleaner	Calvatis	Jar	litter	Plastic rigid	400	
Cleaning	All-Purpose Clea		Jar	5 litter	Plastic rigid	30	
Cleaning	Dishwashing Liqu		Jar	5 litter	Plastic rigid	30	
Cleaning	All-Purpose Clea		Jar	2 litter	Plastic rigid	_30	
	All-Purpose Clea				Plastic rigid	180	





Sorting of Hotels waste NAHDET Misr Alexandria (As

treatment side)





















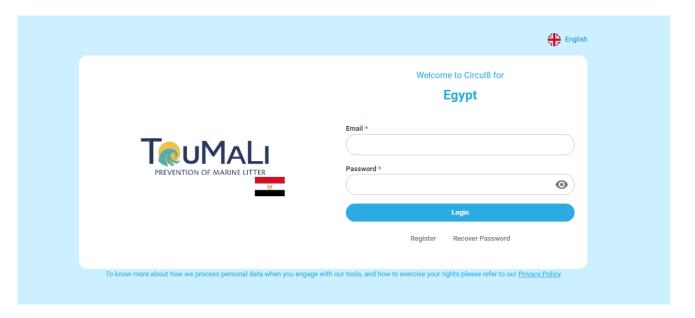








• Landbell as the EPR developer in TouMaLi team developed a customized portal for Egypt EPR pilot project in Alexandria























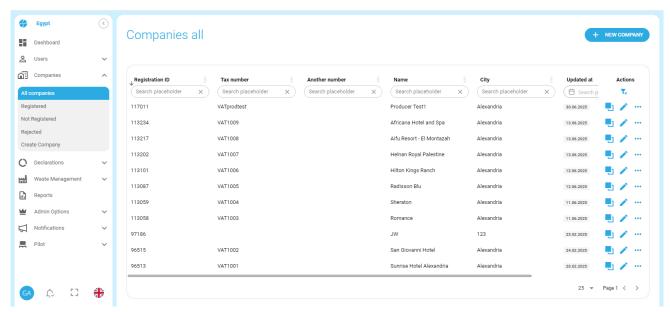




EPR Pilot Alexandria - status - and Data collection from Hotels

Arab Academy is the local partner for TouMaLi project entered the data for about 9 hotels (producers) as materials

added to the market.



• WMRA is informed that the data of the package material are entered to the platform and they can use the Egyptian portal for Circul8 to explore the platform with the filled data.



















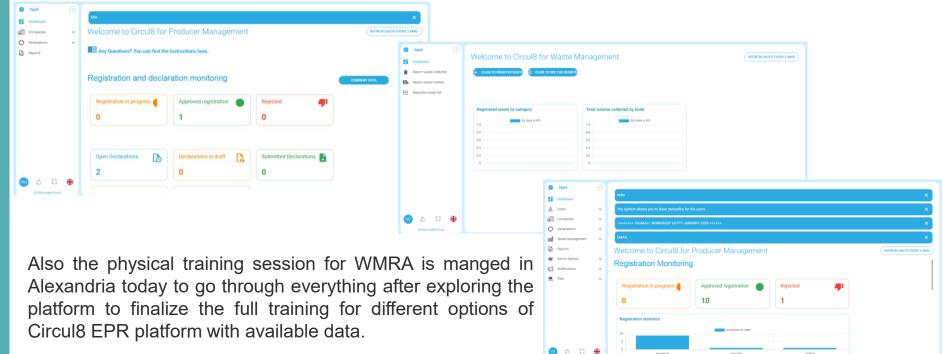




EPR Pilot Alexandria - status - and Data collection from Hotels TouMALI



Three accounts are created for WMRA to act as Producer, Waste Management Company and Operations Manger to fully explore, monitor, control and test all the situations and options for the Circul8 Platform customized for TouMaLi EPR pilot in Alexandria.

























Lesson Learned and exit Strategy for EPR implementation



- Activation of the EPR system on the national level is necessary for the financial sustainability for the waste management system at all levels.
- Any delay in EPR implementation will cost the government a lot of money required to sustain the WM operation with a minimum quality.
- Full knowledge and training of EPR operation for WMRA staff is necessary to be ready once the EPR system is active.
- The producers are one of the main key elements in the EPR implementation, their cooperation is necessary and the first step is the registration process.
- The incentives to producers to join the EPR system by registration are required even before the formal activation of the EPR
- Different incentives and benefits should be available for producers during the EPR system operation to motivate them to adapt their strategies to be ready for EPR activation
- Informal producers for packaging materials should be included in these incentive programs to upgrade their production system to more environmental-friendly technologies.





































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