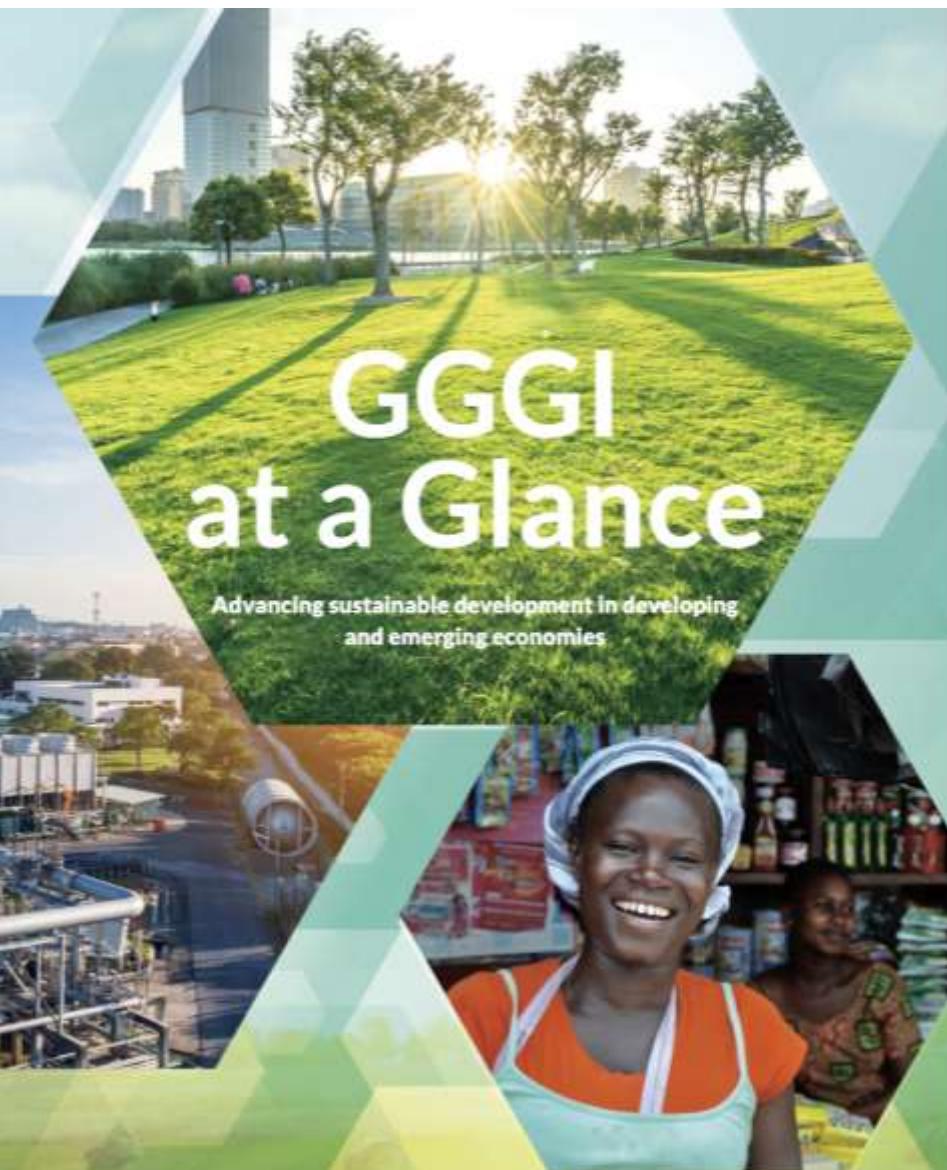




Brown Bag Lunch Talk - ETRA

Tyre Recycling in Morocco – opportunities to contribute to green transition

Introduction



The **Global Green Growth Institute (GGGI)** is a treaty-based international organization focused on supporting developing and emerging economies to achieve sustainable, inclusive economic growth.



Our Vision

Advancing sustainable development in developing and emerging economies

A LOW-CARBON, RESILIENT WORLD OF STRONG, INCLUSIVE, AND SUSTAINABLE GROWTH



Our Mission

GGGI SUPPORTS ITS MEMBERS IN THE TRANSFORMATION OF THEIR ECONOMIES TO A GREEN GROWTH ECONOMIC MODEL.



Our Position

A TRUSTED ADVISOR & DEVELOPMENT PARTNER EMBEDDED IN MEMBER & PARTNER GOVERNMENTS

Our Thematic Areas



Sustainable Energy



Sustainable Landscapes



Green Cities

ABOUT GGGI



VISION

GGGI supports its Member countries in the transformation of their economies to a green growth economic model.

MISSION

A low-carbon resilient world of strong, inclusive, and sustainable growth.



POSITION

A trusted advisor & development partner embedded in member & partner governments.



How we work



Headquartered in Seoul, Republic of Korea GGGI currently has **48 Member States** and operations in over **40 countries**.

- GGGI has a unique in-country presence and prominent role as a neutral, trusted advisor and strategic development partner embedded in Member and partner governments.
- GGGI's operating model maximizes the potential to translate green growth strategies and policies into green investment plans, mobilizing green finance commitments needed to bolster support for low-carbon and climate-resilient economic development and strong institutional capacity development.



GGGI's Value Chain & Thematic Areas



GGGI Value Chain



Solar Energy



Forest (Sustainable) Landscapes



Green Buildings and Industry



Green Investment Services (GIS)



Waste



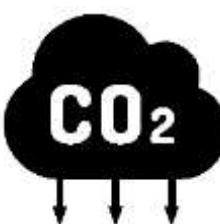
Gender and Inclusive Development



Sustainable Transportation



Climate Action and Inclusive Development (CAID)



Carbon Pricing Unit (CPU)



The commitment of the GGGI to the Government of Morocco is to support the country in its transition towards a green economy, one of the pillars of the National Strategy for Sustainable Development (NSSD).

The GGGI accompanies the process of implementing the NSSD, the Nationally Determined Contribution (NDC), and the Sustainable Development Goals (SDGs), through the promotion and support of the implementation of a green, inclusive, and sustainable development model at the territorial level, aligned with the advanced regionalization process adopted by Morocco.



Ongoing Programs



1. Climate Finance

→ Enhancing Access to Climate Finance in Morocco's regions through:

- Design and establishment of a multi-sector National Financing Vehicle (NFV) to help territories (regions, municipalities and communes) access climate finance;
- Development and prioritization of a pipeline of bankable and climate-resilient projects in Tangier region including the design and implementation of a training of trainers Capacity building program for regional actors on climate finance and climate resilient project's concept note development

2. Circular Economy and Waste Management

→ Supporting Morocco's National Mitigation Action in the Waste Sector

- Deliver methane assessments and a roadmap for priority mitigation measures in key source sectors
- Develop landfill gas assessments of waste mitigation strategies and MRV system for the waste sector

→ Structuring "Organic Waste to Energy Investment" National Program

→ Structuring of a used tire value chain and a used tire material recovery sector in Morocco

3. Carbon Pricing and Article 6

→ Designing Policy Approaches Under Article 6

→ ITMO Generation through an Organic Waste to Energy program in Morocco

4. Energy Transition and Investment Mobilization

→ Supporting Morocco's Energy transition through the development of Renewable Energy large-scale investment projects: Green Hydrogen (Power-to-X); Floating Solar PV; Offshore Wind; OWtE

Development Partners



Foundation for
Climate Protection and
Carbon Offset KliK



Morocco economic - industrial context (cement industry but also automotive, tyres, etc.)

Cement Industry

- A key player in the Moroccan economy, generating around 2.8% of GDP and employing over 50,000 people directly and indirectly.
- Major producers include LafargeHolcim Maroc, Ciments du Maroc, and Ciments de l'Atlas.
- The industry faces challenges like rising energy costs, environmental regulations, and competition from foreign imports.



Cement factory in Morocco

Automotive Industry

- A rapidly growing sector, attracting major international manufacturers like Renault, Peugeot, and Stellantis.
- Contributes around 27% of Morocco's industrial exports and employs over 150,000 people.
- The industry focuses on producing affordable, low-emission vehicles for both domestic and export markets.



Renault factory in Morocco

Tyre Industry

- The country's expanding automotive industry and increasing vehicle ownership rates propel tire demand.
- Morocco's strategic location as a gateway to Africa boosts the transportation sector, necessitating regular tire replacements.
- The growing awareness of road safety and the need for high-performance tires further stimulate market growth.
- Government initiatives promoting local tire manufacturing and sustainable practices contribute to the market's expansion.
- The influence of changing weather conditions and terrain variations across the country also drive the demand for specialized tires, making it a dynamic and evolving market

- ➔ The Chinese tire company Qingdao Sentury is investing \$297 million in the building of a car tire factory located in the northern Moroccan city of Tangier.
- ➔ The company chose Morocco as Qingdao Sentury believes the North African country offers a stable economy and political environment.
- ➔ The company recognized Morocco's prime geographic location and favorable investment conditions, good trading policies, as well as strong and easy access to European and American markets.



Morocco's Tyre Industry: A Growing Sector with Significant Potential

- The tire industry in Morocco is a vital part of the country's economy, contributing significantly to exports and employment
- Major factors driving the growth of Morocco Tire Market include robust automotive industry growth, increasing vehicle ownership, rising consumer demand for high-performance and eco-friendly tires, government initiatives promoting road safety, and expanding infrastructure development.

Current state:

- Market size: Estimated at USD 372.74 million in 2022, with a projected annual growth of 4.26%.

Major players:

- International: Michelin, Goodyear, Continental, Dunlop, Bridgestone, Yokohama
- Local: Maroc Tyre, Fakiya Lys, Rocamora, Imperial Pneu, and Toupneu

Challenges:

- Environmental regulations: Stringent regulations regarding waste tire management and emissions.
- Technology: Need for innovation and investment in new technologies for tire recycling and sustainability.

Future potential:

- Expansion of production capacity: Several companies are planning to expand their production capacity in Morocco.
- Focus on sustainability: The industry is increasingly focusing on sustainability, including tire recycling and the use of recycled materials.

Data on EOL tyres in Morocco

According to data from the Ministry of Equipment and Transport, the number of vehicles in circulation in Morocco reached 11.8 million in 2022. This figure represents a 4.5% increase compared to 2021.

The distribution of vehicles in circulation by type is as follows:

- Private cars: 8.9 million
- Trucks: 1.6 million
- Buses: 0.3 million
- Motorcycles: 1.0 million.

→ The rapid growth in the number of vehicles in circulation has resulted in a significant local generation of used tyres, leading to the accumulation of a significant national deposit of 48,180 MT annually (2015).

→ The quantity of used tyres is estimated to increase by 5% in the coming years, and by 2024 it is expected to exceed **75,000 MT** annually, and **100,294 MT** annually by 2030.

UT Policy and Regulatory Framework

- Policy that includes the development of waste value chains Morocco has adopted a Framework Law on the National Charter for the Environment and Sustainable Development, which is based on internationally recognized principles.
- The National Sustainable Development Strategy (NSDS), adopted in 2017, prioritizes a circular economy and sustainable waste management and lists the "Promotion of integrated waste management for the implementation of a circular economy" among the strategic areas under the second pillar relating to the "Successful transition to a green economy."
- In terms of recycling, in its Nationally Determined Contribution (NDC), Morocco has clearly defined its sorting-recycling-recovery objective of 20% of the waste generated by 2020.
- Building on these efforts, in February 2019, it also adopted its National Strategy for Waste Reduction and Recovery (Stratégie Nationale de Réduction et de Valorisation des Déchets - SNRVD) with the aim of increasing the rate of transition to a circular economy. The SNRVD 2030 used tyres recovery objective is 80%.
- SNRVD-Strategic Area 5: Development of a circular economy to promote the creation of green jobs. Among the targeted actions is Action 17, which stipulates: Develop the sector of used tyres management and material recovery, providing a solid basis for the design of a relevant technical assistance approach aimed at supporting Morocco in achieving its objectives in this area.

The obstacles to be addressed to implement and expand tyre recycling -

- ➔ Strategic legal, institutional, financial and operational constraints, characterized by:
 - Deposits of used tyres abandoned throughout the territory.
 - Heavy imports of old retreaded tires to extend their use on the national territory until their residual capacity is exhausted, contributing to an increase of the used tyres deposits.
 - All local new tire sales are imported since the closure of the General Tire plant in 2002 and the Goodyear plant in 2006.
 - Imports of large quantities of shredded used tyres from Europe for energy recovery in cement kilns.
 - Absence of a structured and equitable value chain for the collection, sorting, processing, distribution and management of used tyres.
 - Absence of a sector for the recovery of raw material obtained from tires (rubber, steel, textile fiber) and production of products from these raw materials.
- ➔ To date many efforts have been made to plan for the energy recovery of used tyres in Morocco.
- ➔ A partnership agreement for the establishment of an ecological used tyres material and energy recovery sector was signed on June 20, 2014 between the Department of Environment; the Ministry delegate of the Minister of Industry, Trade, Investment and Digital Economy, in charge of Small Businesses and Integration of the Informal Sector; and all of the relevant associations.
- ➔ This initiative was insufficient to remedy the elimination of the growing used tyres deposits in Morocco, despite some specific collection initiatives for tire incineration in cement kilns that have been carried out. In the absence of an established value chain, the cement producers continue to import considerable quantities of shredded tires for their energy needs.

Success stories in Morocco



- Date of creation: 01/06/2019
- Professional and structured unit for the valorization of pneumatic waste into material
- Activity: Recycling of used tires, manufacturing of bricks and rubber mats, and extraction of iron and nylon fibers.
- Located in the Z.A.E El Youssoufia (2284m²)
- Production of:
 - Rubber granules and extraction of stainless steel.
 - Iron fibers, nylon fibers, brick manufacturing, manufacturing of cushioning mats, and tire storage.



Maroc P.U.R Ecologie sarl

- Launch date: June 2023
- Recycling facility for used tires and all rubber rubber products
- Project location: Larache's industrial zone, zone, Lahyayda - Tangier Region (25104m²) (25104m²)

Main manufacturing process:

- Shredding; Grinding and Sieving
- Transport and storage on a sealed platform;
- Primary shredding and grinding to remove steel and textile fibers;
- Secondary grinding and then tertiary grinding;
- Storage and delivery.



Finished products:

1. Energy recovery chips for cement plants.
2. Rubber granules for sports facilities, sports fields, and children's play areas.
3. Fine rubber granules for the plastic injection industry and tire industry.
4. Steel for valorization by foundries.
5. Textiles for energy recovery in cement plants.



Suggestion

- The current efforts being undertaken in Morocco are insufficient to remedy the elimination of the growing used tyres deposits in Morocco, despite some specific collection initiatives for tire incineration in cement kilns that have been carried out. In the absence of an established value chain, the cement producers continue to import considerable quantities of shredded tires for their energy needs.
- Within this context, given the increasing global demand for products derived from the material recovery of used tyres, the development of a used tyres material recovery ecosystem will complement the existing energy recovery activity. Indeed, the implementation of a national used tyres value chain will enable the sustainable sourcing of raw materials to produce new products from the recovered material as well as the production of energy for local industry.
- This provides an opportunity for Morocco to develop an ecosystem for a growth sector, for which the new businesses created will contribute to inclusive green growth, job creation, and exports, which, in turn, will lead to socio-economic development through the creation of employment and green investment opportunities.

Type of support would be helpful from EU Commission

With the European Tyre Recycling Association (ETRA) as a technical partner, GGGI is aiming to support the implementation of the two following measures:

- 1-Support the structuring of the used tyres value chain in Morocco;
- 2-Support the enabling conditions for the development of a used tyres material recycling ecosystem in Morocco.

The technical assistance will include policy and investment project interventions as well as capacity building and knowledge sharing program on circular economy and UT.

Type of support would be helpful from EU Commission

Provide support for the three following components:

1- Capacity building and knowledge sharing program on Circular economy with a particular focus on UT material Recovery

- Support the design of an outreach campaign aimed at raising awareness about the opportunities and incentives for participating in the used tyre recovery process;
- Develop and deliver a capacity-building and knowledge-sharing program on new legal mechanisms for public and private sector players involved in the used tyres value chain in Morocco;
- Encourage the sharing of experience and knowledge between the key national stakeholders and the members of ETRA on opportunities to develop this value chain, in particular within the framework of the ETRA annual conference organized each March in Brussels, Belgium.

2- Support the structuring of the used tyres value chain in Morocco

- Situation assessment
- Development of institutional and regulatory framework to support the implementation of the used tyres value chain
- Develop a benchmark for used tyres value chain management systems in other countries where ETRA operates to identify the most appropriate system adapted to the Moroccan context

3- Support the enabling conditions for the development of a used tyre material recovery ecosystem in Morocco

- Develop sustainable business models to attract public and private investment to operationalize a new system for used tyre recycling.
- Identify funding opportunities and prepare funding application files with partners identified nationally and internationally for the operationalization of a used tyre material recovery ecosystem

Mr. Abdelmajid Bennis Nechba

Country Lead, GGGI Morocco Program
Global Green Growth Institute (GGGI)

c/o Ministère de La Transition Energétique et du Développement Durable, Département du Développement Durable
9 Avenue Al Araar, secteur 16 Hay Riad, Rabat, Morocco | Maroc

abdelmajid.bennis@gggi.org

www.gggi.org