Building upon & beyond Reflecting on the past, Shaping the future

Sustainable Mobility in Morocco: Commitments & Actions

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Transport and Climate Change Week #TransportWeek23





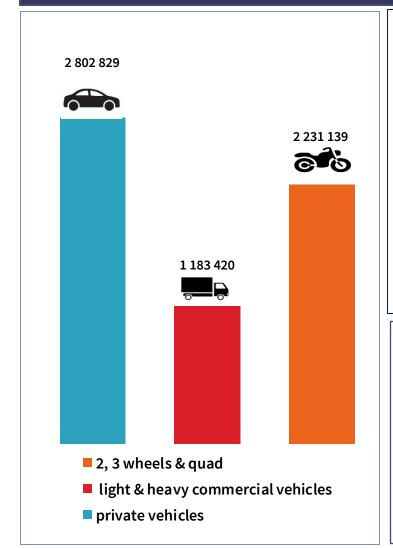


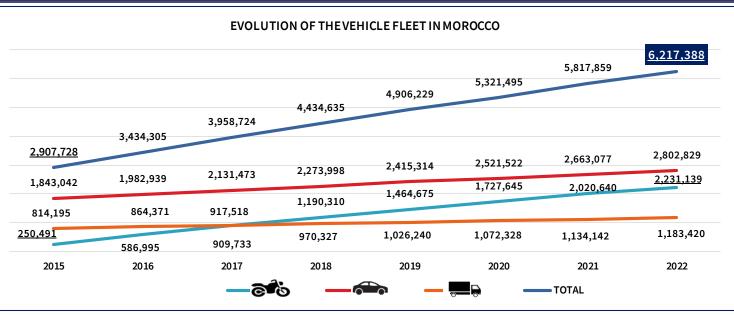
- **01** The transport sector in a few figures
- 02 Morocco's commitments & ambitions
- **03** Vision and actions: national level
- Vision and actions: urban mobility

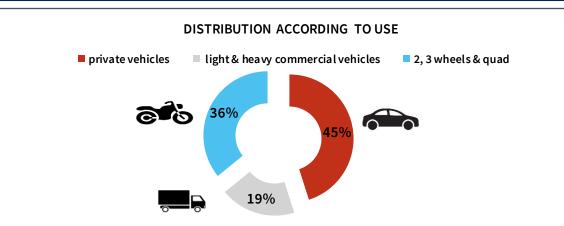
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Key figures in 2022: Vehicle fleet







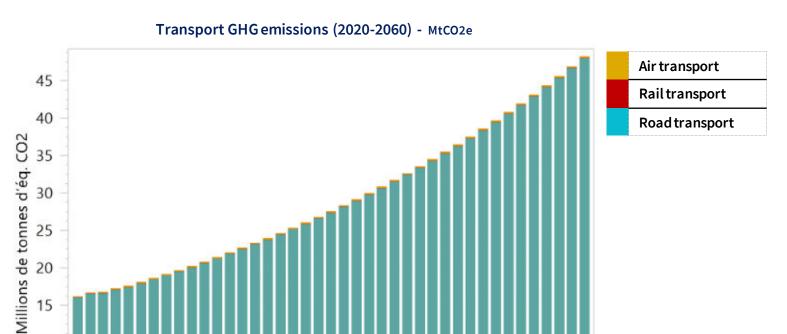
+7%
growth
rate
(2021/2022)



20

5

Transport sector: Energy consumption & GHG



+ 200%

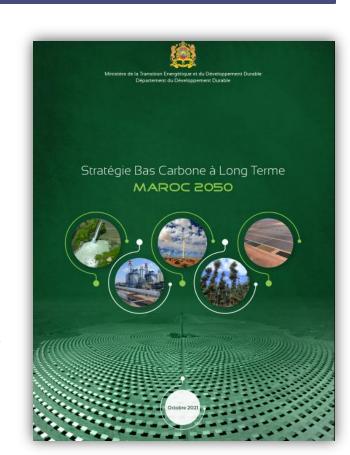
GHG emissions from the road and rails transport sector by 2060

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Long-Term Low Carbon Strategy - Morocco 2050

- Under Article 4.19 of the Paris Agreement, Morocco has developed and published its <u>Long-Term Low Carbon Strategy</u> (LT-LEDS), which aims to (e.g.):
 - Stimulate the development of new green value chains,
 - Improve the <u>competitiveness</u> of Morocco's economy,
 - Ensuring its <u>decarbonization</u> and its proactive export positioning,
 - Taking into account similar developments, in particular the "Green Deal" of the European Union and the new continental free trade area of the African Union (ZLECAF).
- This strategy <u>will be supplemented by modeling work on development trajectories</u> and emissions, and by analysis of sectoral dynamics to assess Morocco's capacity to reach climate neutrality during this century.





Long Term Low Carbon Strategy (LT-LEDS) - Morocco 2050: Road Transport

Short-term

Before 2030:

Introduce new standards for the consumption and emissions of vehicles placed on the market, whether new or used. Mid-term

2030-2035:

The medium term could be dominated by the need to invest heavily in the development of new infrastructure

Long-term

Beyond:

deployment of zeroemission vehicles, first electric, then possibly hydrogen, as well as the corresponding industrial capacities



Morocco's Updated NDC (2021): Kingdom's Commitments in the Transport Sector

45.5%

GHG mitigation

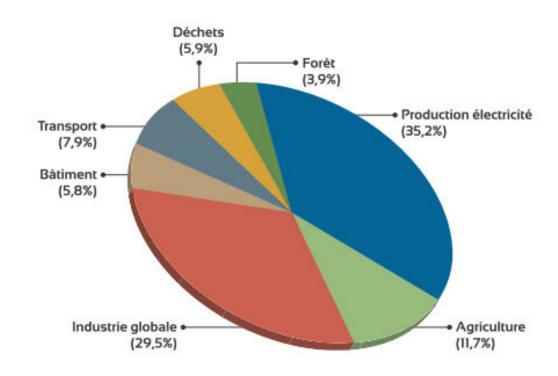
18.3%

unconditional

27.2%

conditional

% of each sector in the overall mitigation effort (unconditional and conditional) in 2030





Morocco's Updated NDC: Kingdom's Commitments in the Transport Sector

		Projects	Potential attenuation of CO2eq emissions 2020-2030 (Gg CO2)	
	1	Extension of tramway networks in Rabat	153.8	Unconditional
\bigcirc	2	Extension of the Casablanca Tramway networks	204.5	Unconditional
\bigcirc	3	Application of CO2 emission performance standards for new passenger cars and for new light commercial vehicles	10,935.6	Conditional
	4	Bonus-Malus system to encourage the acquisition of clean vehicles	1504.2	<u>Conditional</u>
	5	Improvement of environmental standards for vehicles	6,487.2	<u>Conditional</u>
	6	Renewal of the commercial vehicle fleet	233.6	<u>Conditional</u>
10	7	Eco driving training program	184.6	<u>Conditional</u>

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Ongoing / planned projects (at national level)



MRV system for GHG emissions from the road and rail transport sector > better management and monitoring of strategies







Continue implementation of the heavy vehicle scrappage program (trucks, coaches...) (start: 2008)

(2019-2023:25 M\$ / year)



"Safe-autocar" project aiming to improve the safety and attractiveness of coaches





Establish a regulatory framework for micromobility by supervising the implementation of approval rules and adapted traffic rules



Study concerning CO2 Regulations (Corporate Average Fuel Economy)

The objective is to control the rate of CO2 emissions from new vehicles entering the vehicle fleet in Morocco.



Study relating to the implementation of a Bonus-Malus system

Financial incentive based on CO2/km rate to encourage people to opt for cleaner vehicles

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National context

Transportation, one of the country's biggest polluters











GHG emissions from transport

70% emissions

of the national transportation sector are generated in urban areas

NDC objectives for Morocco by 2030

7,9 %

Part of the transport sector in the global effort mitigation

Measures

- 358'300 Tons CO2

CO2 eq mitigation potential 2020-2030

- Rabat tramway extension
- Casablanca tramway extension







The Ministry of Interior decarbonization vision and projects

A vision based on several levers of action



Strengthening the institutional, legislative and regulatory framework, notably through the creation of SDLs and ECIs/GCTs, and the development of SUMPs (Sustainable Urban Mobility Plans);







Improving public transport services in conurbations, in particular through tramway and BRT projects and the renewal of bus and taxi fleets;



Setting up sustainable financing mechanisms (FART).



Capacity-building for local authorities in the organization and management of traffic, roads and parking;





The Ministry's decarbonization vision and projects

A Strategic Roadmap for Sustainable Urban and Interurban Mobility (2040)

17

17 to 20%

Modal share of public transport (compared with 8-13% today)



> 5%

Modal share of bicycles



16%

Modal share of private vehicles (maintained at current level)



1 to 2%

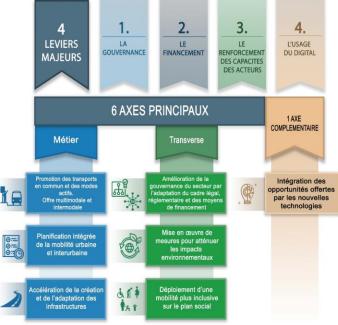
Reduction in GHG emissions from urban and interurban mobility compared with the BAU scenario



0

Number of days PM-2.5 levels exceeded WHO recommended thresholds

(WHO recommends not exceeding 10 $\mu g/m3$ on an annual average (and 25 $\mu g/m3$ over 24 hours))



Regulatory framework of urban mobility

Urban mobility planning

Innovative financing mechanisms

New technologies and modes

Public transport and intermodality

Major partnerships are underway to decarbonize urban mobility

Sustainable mobility with renewable energies in Morocco

Decarbonization of Transportation in emerging economies Sustainable urban Mobility / Essaouira

Active mobility

Electric mobility

MRV Urban transport

.6





Completed

The Ministry's decarbonization vision and projects

It all starts with planning ...

12 Urban Mobility Plans

6 SUMP

In progress

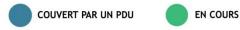
4 SUMP

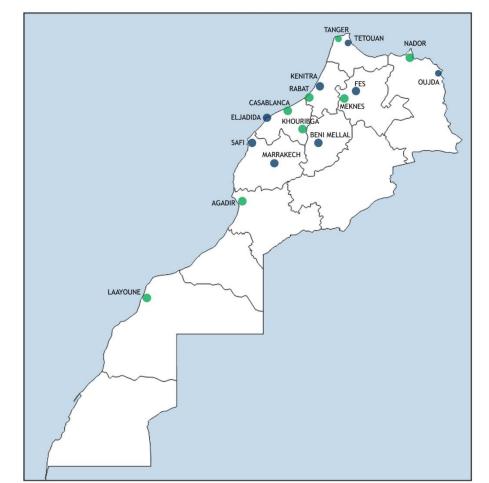
planned



- Calculation of GHG emissions via travel modeling
- Estimation of effects on air quality
- Promotion of the most sustainable projects and approaches

_COUVERTURE NATIONALE EN DOCUMENTS DE PLANIFICATION DE LA MOBILITE :









The Ministry's decarbonization vision and projects

Promoting sustainable public transport: Notable achievements over the past 10 years

Tramway



- 72 km achieved in the cities of Casablanca (T1+T2) and Rabat-Salé (L1+L2)
- 28 km under construction in Casablanca is (T3-T4)

BRT



- 22 km under construction in Casablanca (L5-L6)
- 15,5 km in Agadir (L1).
- 11 km Marrakech

Bus



• Adoption of Euro 5 and Euro 6 buses as part of the new delegated management contracts, particularly in Casablanca, Rabat and Kenitra

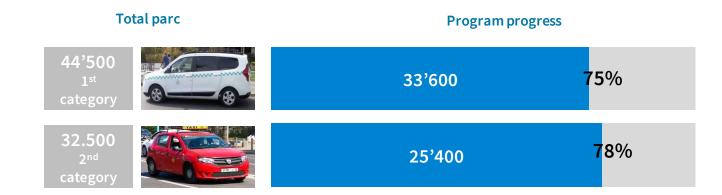




The Ministry's decarbonization vision and projects

The Taxi Renewal Support Program

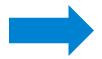
- Initiated in 2010 for 2nd category taxis and extended in 2014 for 1st category taxis
- Renewal bonuses
- Financed by the State budget through the FART (Road transport reform support fund)



- 0,4 millions tons

of CO2 emissions per year

- 30% vehicle diesel consumption, thanks to more fuel-efficient vehicles with modern engines



- Contributes to the objectives of the sustainable development strategy
- One of the NDC unconditional actions

Transport and Climate Change week

#TransportWeek23

THANK YOUR FOR YOUR ATTENTION

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