



## Implementation of Vehicle Emission Standard- Case of Rwanda

**August**, 2022





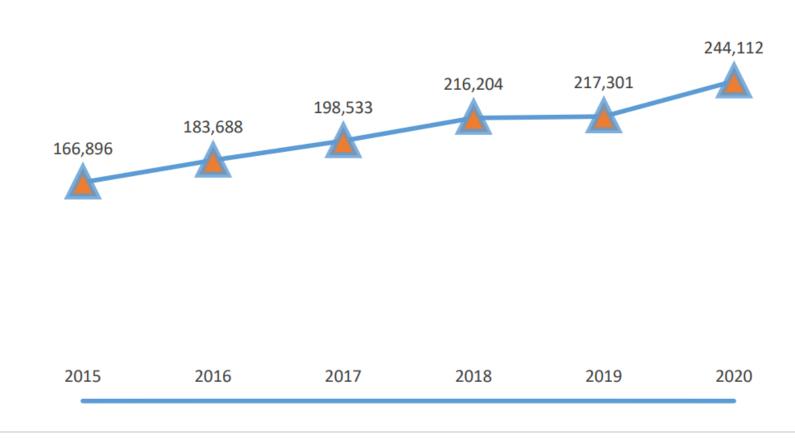
- Transport sector in Rwanda is growing quickly and expect to and rate of vehicle importation is at 12%
- Emissions from road traffic are a major contributor to poor air quality in many urban environments across the globe
- Air pollution level (mainly caused by vehicle emissions) is currently at 900Ktones CO<sub>2</sub>Eq (SMART, 2019)
- Cars represent high proportion of imported second-hand vehicles, thus high contribution to air pollution
- Safety of people is at risk due to old vehicle fleet as many recorded accidents were resulting from mechanical failures



## 2.Vehicle emissions control context

- National Transport Policy and Strategy for Rwanda (April 2021) Promotion of
  - Promote, through incentives, the purchase of low polluting vehicles, electric vehicles and trains.
  - Continue periodic vehicle inspection and testing for safety, compliance with emission standards, and certification of auto garages.
- Law N° 18/2016 of 18/05/2016 governing the Preservation of Air Quality and Prevention of Air Pollution in Rwanda
  - Any person owning any means of transport of people and goods which is an emission source must control production and emission of air pollutants.
  - Means of transport referred to under Paragraph One of this Article operating in Rwanda must undergo an inspection for emissions control.
- Ministerial Order N°02/2018 of 17/09/2018 relating to Air Pollutants Emission
  - Fine of 25,000 Rwf for non compliance with emission standards





Cumulative number of Registered Vehicles in Rwanda
 Rate of vehicle importation is at 12%

# 3. Current situation on imported used vehicles cont'd

Age range	Cars (%)	Buses (%)	Trucks (%)	Tractors (%)	Special Engine (%)	All categories (%)
Brand new	8.4	29.2	22.4	53.8	61.3	13
From 1 to 5 Years	13.8	27.2	18.5	15.7	12.1	15.2
6 to 8 years	5.2	8.1	3.4	17.0	3.4	5.8
9 to 10 years	6.8	5.7	4.1	6.8	3.1	6.2
11 to 15 years	34.9	16.5	11.3	4.3	7.0	29.4
More than 15 years	30.9	13.3	36.3	2.3	13.1	30.4

□ Used vehicles represent 87% of imported vehicles from 2014 to 2019



#### 4. Adopted standards

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RS

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EX20	STANDARD

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Emission limits — Performance evaluation

Road vehicles

RS 407-1: 2019

ICS 13.040.50
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- Standards cover the requirements to be fulfilled in order to pass the inspection and testing for exhaust emissions compliance by all categories of vehicles used on Rwandan soil
- They classify cars into three categories namely: new vehicles, imported used vehicles and in use vehicles
  - The adopted road vehicle emission limit standards were developed in compliance with the EAC regional recommendations
  - New vehicles and imported used vehicles need to fulfil requirements equivalent to EURO IV emission limits while in use vehicles (already in Rwanda) are subjected to comply with the comprehensive emission limits sets in the developed standards after consultation with relevant stakeholders
- Note: under the provisions of Article 6 of the Ministerial Order No.
   02/2018, all motorcycles imported into Rwanda must be brand new



#### 4. Adopted standards

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Rwanda Standards Board		

2019-09-1	First editio
	2019-09-1

RS

407-1

Emission limits — Performance evaluation
Part 1:

Road vehicles

Standard provisions:

RWANDA

STANDARD

ICS 13.040.50

Reference number RS 407-1: 2019

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- All motor vehicles, motor cycles and motor tricycles to be used on Rwandan public roads shall be inspected and tested for compliance with exhaust emissions limits in accordance with the relevant provisions of the adopted Rwanda standard
- No motor vehicle, motor cycle or motor tricycle shall be registered for the first time without a certificate of compliance with exhaust emission limits in addition to any other requirements on roadworthiness
- Imported motor vehicles, motor cycles and motor tricycles shall be accompanied by a certificate of compliance with exhaust emission limits issued by a duly approved agency in the exporting country in accordance with relevant provisions of this Rwanda Standard and Rwandan law
- Motor vehicles, motor cycles and motor tricycles shall be inspected and tested in inspection centers approved by relevant authority



#### 5. Implementation of the standards

- The GoR has established a Motor Vehicle Inspection Centre (MICs) to test the mechanical status of vehicles and recently testing of exhaust emissions have been added
- Emissions inspection is mandatory to all vehicles operating in Rwanda (twice a year for all commercial and public transport vehicles and once a year for other vehicles (private, public and even utilities)

• Most of the time, emission testing is done selectively on road where suspected vehicles meaning those releasing too much smoke are tested for emissions

• RNP Officers use mobile handheld vehicle emission testing equipment





#### 5. Implementation of the standards con'td

• BeatAirPollution compaign was conducted in March - April 2022 where mobile emission testing were conducted in the City of Kigali and other secondary cities along with teaching people about preserving air quality







## 6. Challenges and way forward

#### Challenges

- Inadequate maintenance and servicing of vehicles
- Lack of knowledge of General population about vehicle emission standards
- Capacity of garages to conduct adequate maintenance in consideration of vehicle emissions
- Affordability to acquire vehicles complying to approved vehicle emission standards
- Lack of proper mechanisms and enforcement tools to ensure only complying vehicles are imported
- Failure to inspect motorcycles

#### Way forward

- Awareness campaigns towards proper vehicle maintenance and servicing
- Continuous and regular sensitization campaigns on preservation of air quality and road safety (schools, community gatherings, or road campaigns, ...)
- Proper regulation of garages and spares parts
- Work with Private sector and financing institutions to design a formula that can allow the uptake of relatively expensive vehicles with adequate emission standards
- Start the enforcement of RS 407-1 provisions with relation to importation of used vehicles
- Reinforce the inspection of motorcycles as their number is big



#### THANK YOU

