



**USED VEHICLES AND  
THE ENVIRONMENT**

A Global Overview of Used Light Duty Vehicles:  
Flow, Scale and Regulation

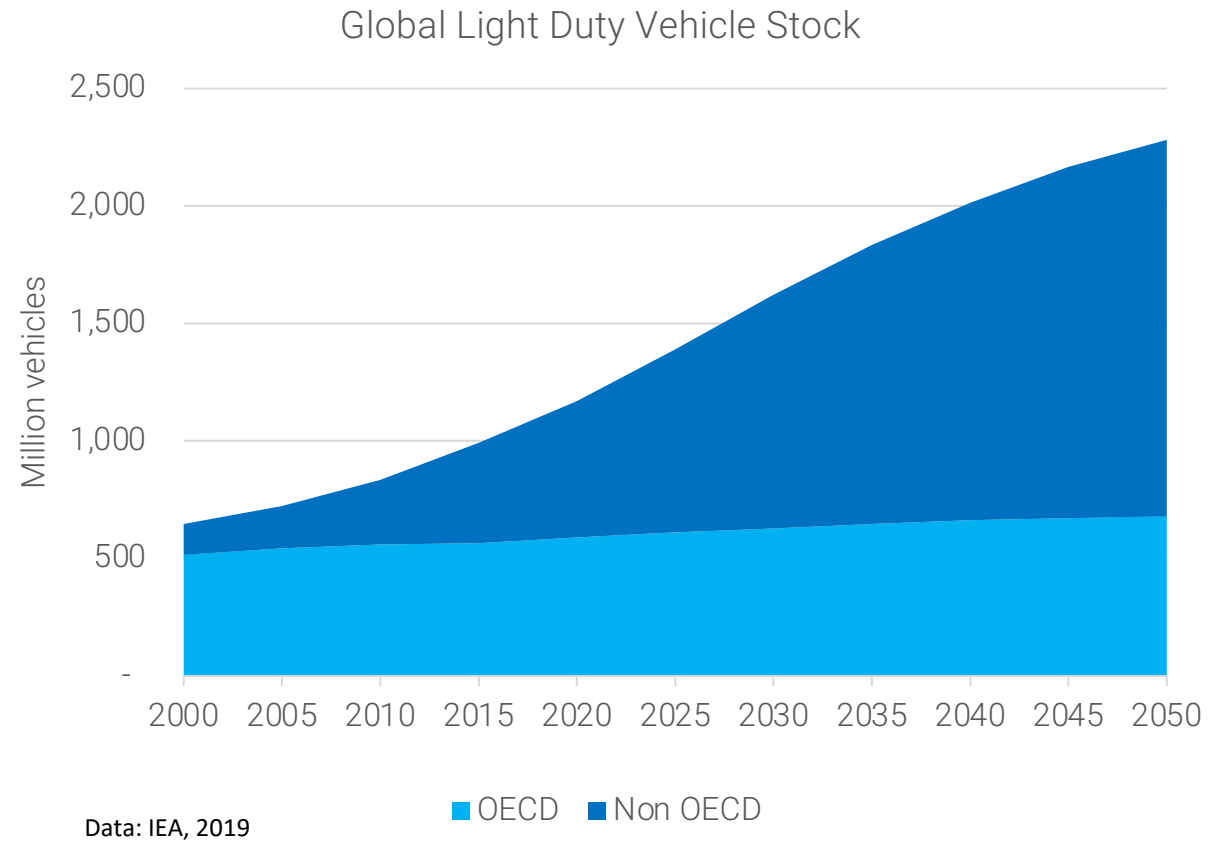
**Rob de Jong**

Head

Sustainable Mobility Unit

# *The Global Fleet is Set to Double...*

Almost all vehicles are added in LMICs....



## *What will those 1+ billion vehicles be?*

- ICE or EV? -> ...ICE
- New or used? -> ...increasingly used
- New: locally produced or imported? -> ...increasingly locally produced

# Many developing countries dependent on used vehicles to grow their fleets...

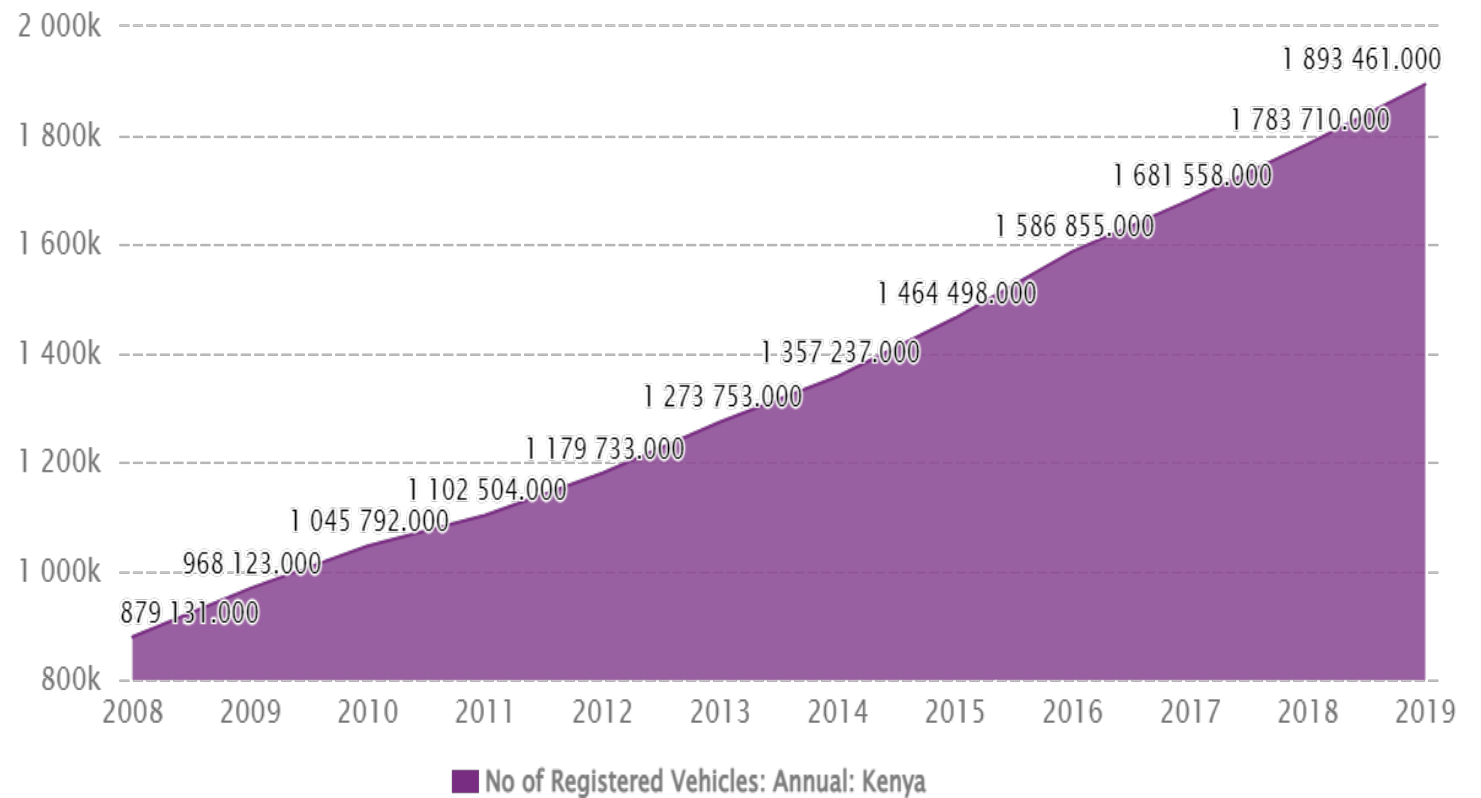
Kenya - 97%

Nigeria - 94%

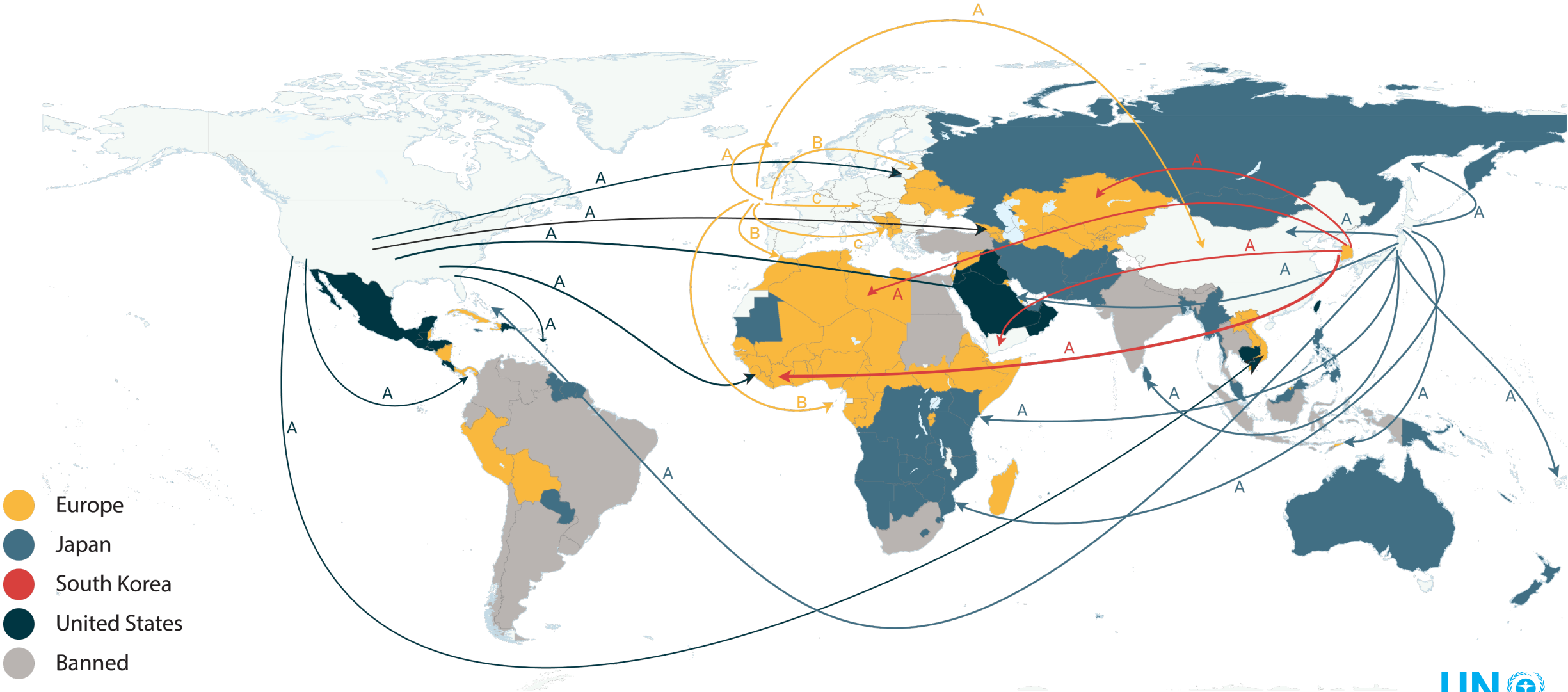
Paraguay - 70%

EL Salvador - 81%

Sri Lanka - 50%



# Where do they come from?

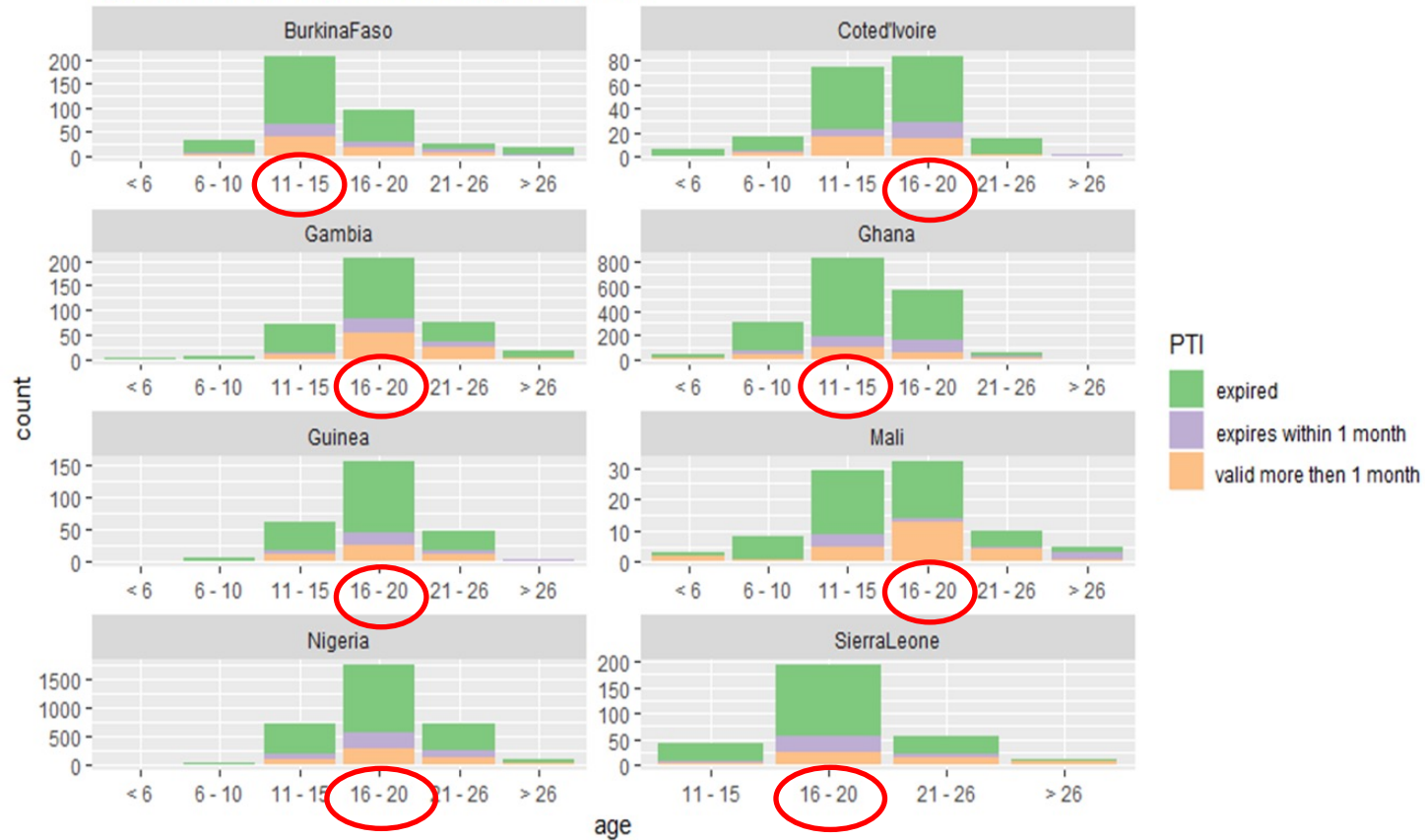


A (20.000-145.000)    B (145.000-270.000)    C (Higher than 270.000)

*These are old....*

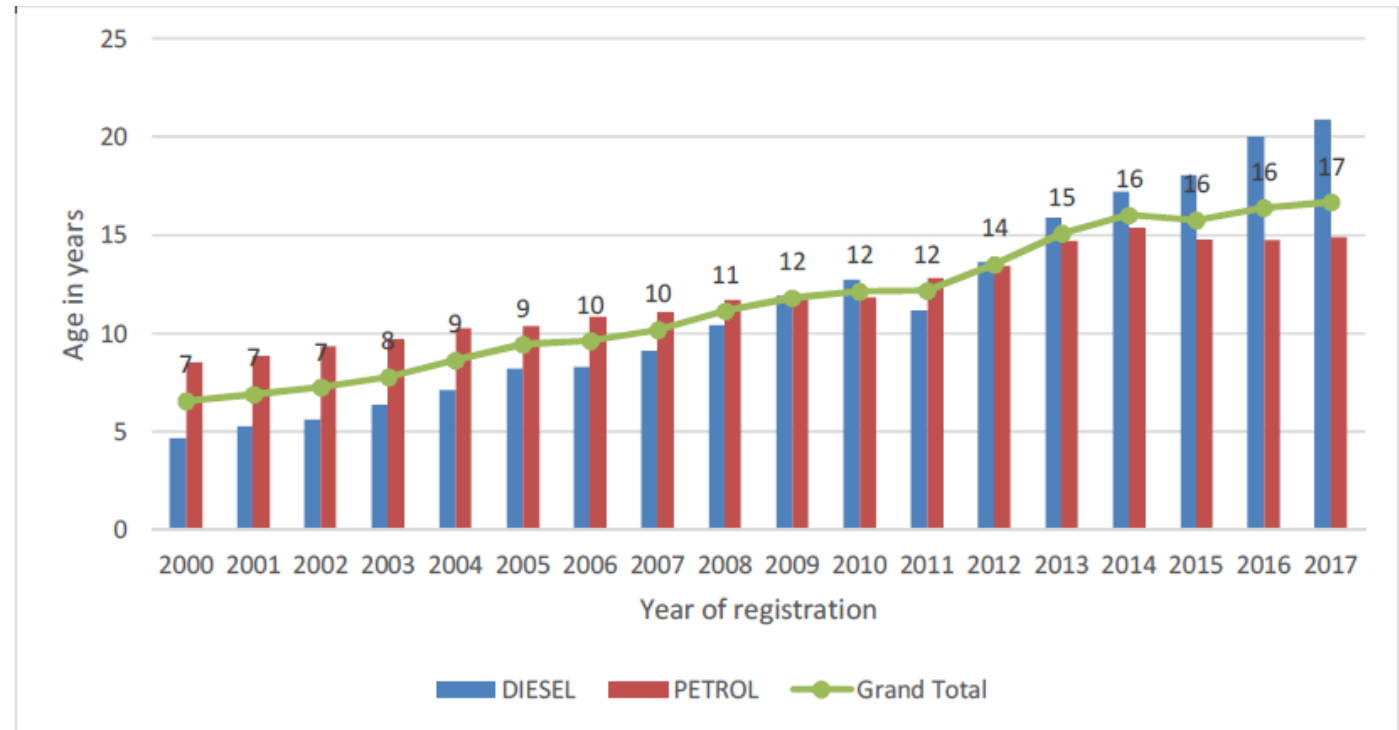
## EU used vehicles exports to West Africa

Age and PTI of retrieved used export vehicles



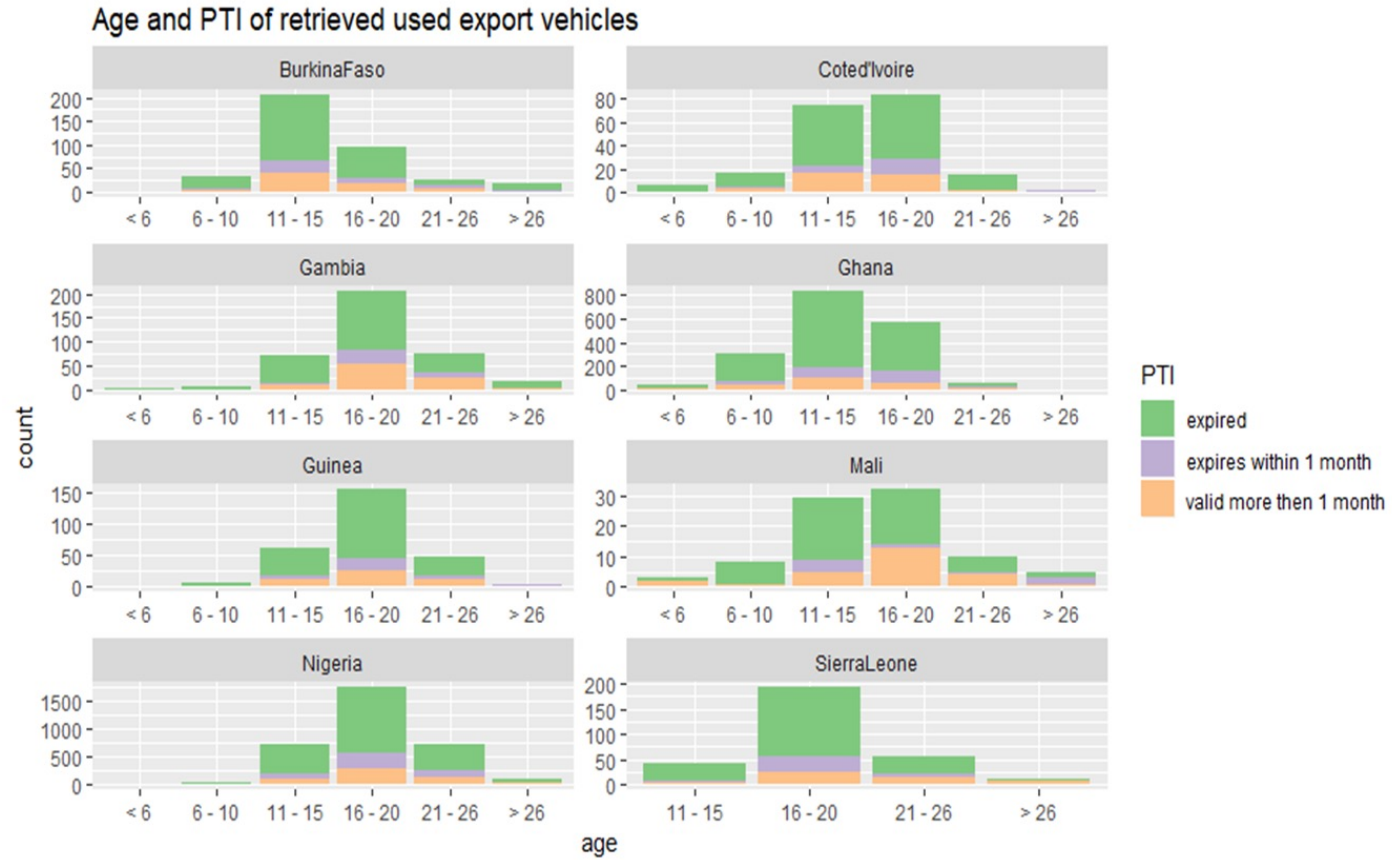
# And getting older....

Average Age of Used Vehicles Imports in Uganda, 2000-2017



*...Uganda's average fuel consumption Uganda fleet about 10% worse than Kenya....*

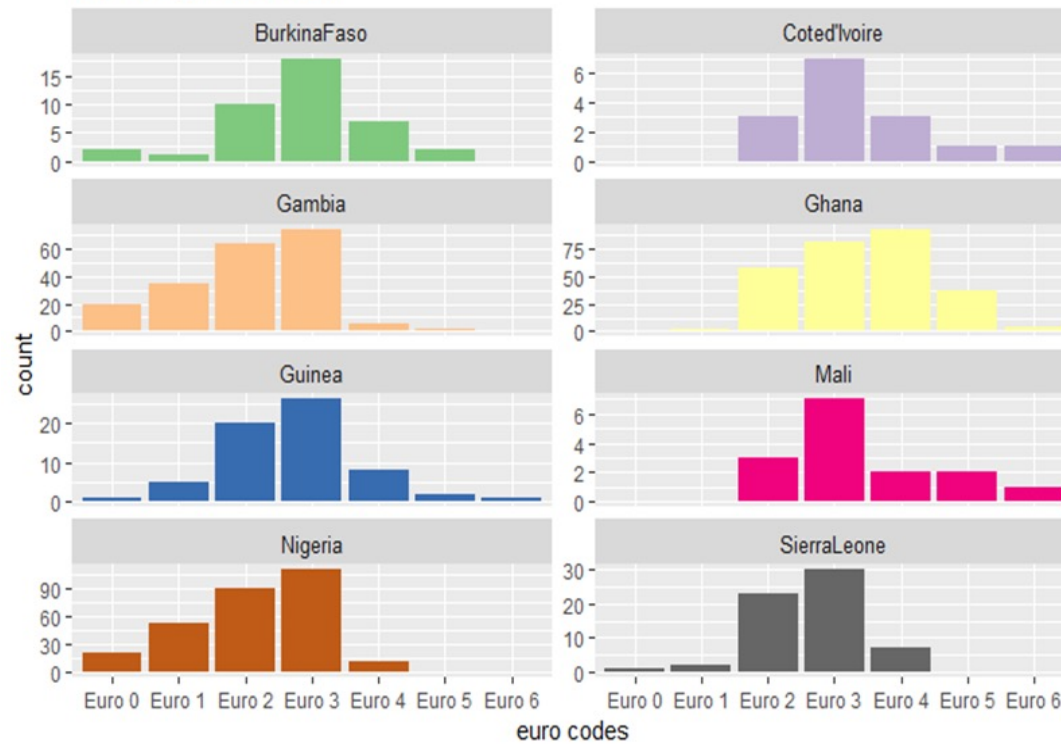
# Many are not roadworthy...



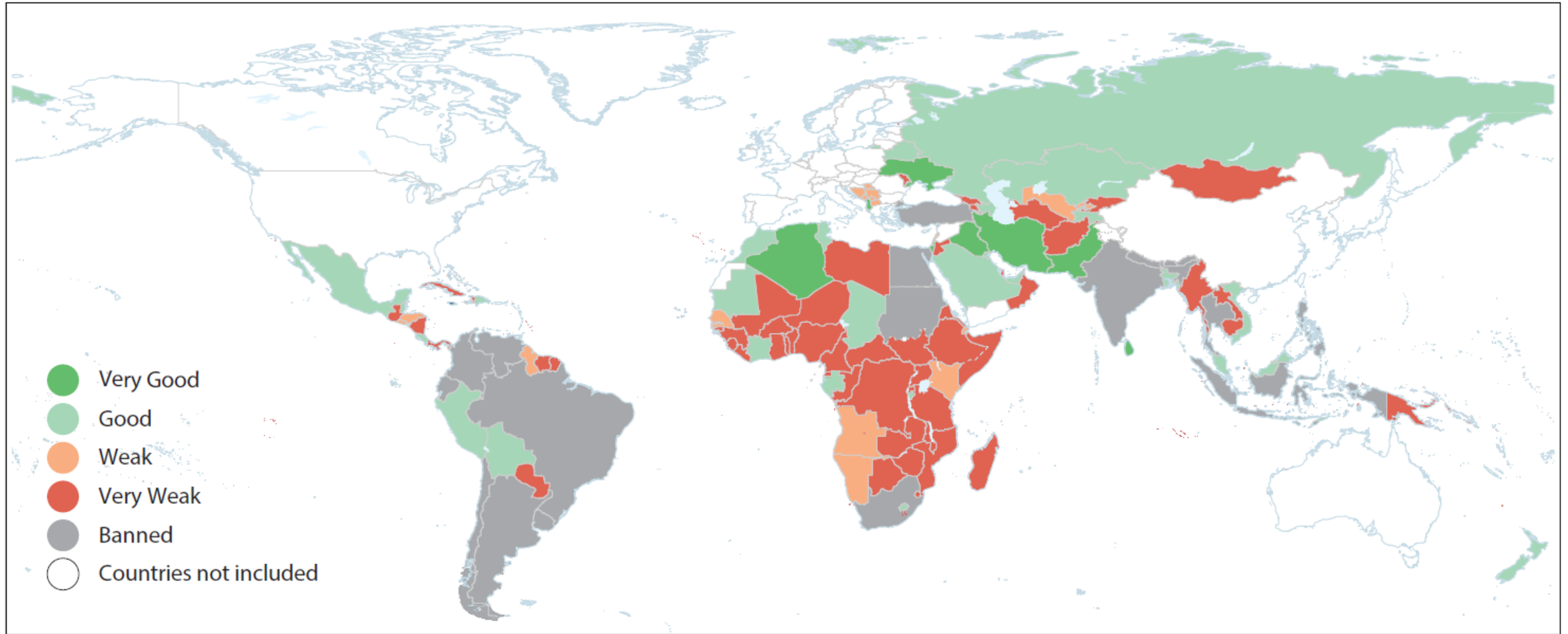


# Almost all are pre EURO4....

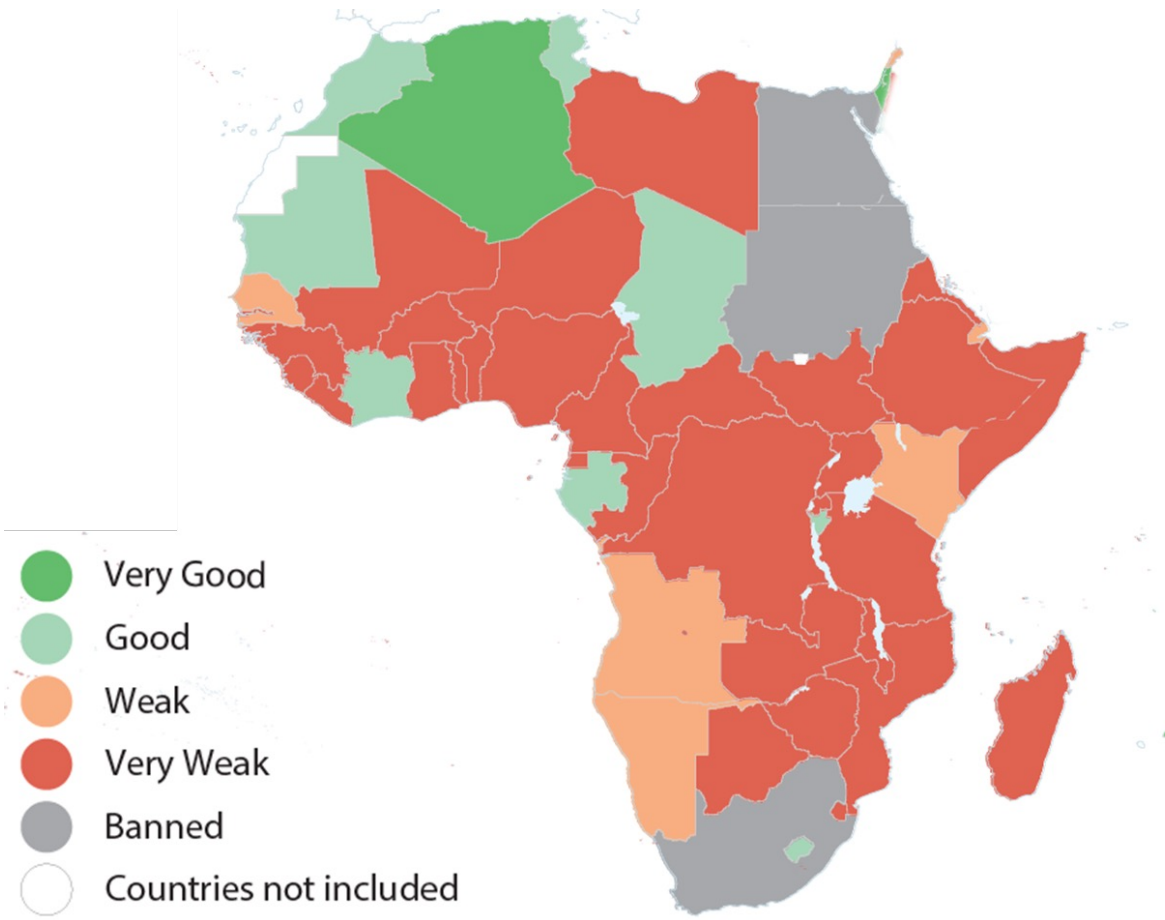
Euro vehicle diesel, emission standards of retrieved used export vehicles, West Africa



# *Weak Policies Result in Poor Quality Imports...*



# Especially in Africa...



Regulatory Environment Ranking (UNEP)	Countries	Region
Very Good	Algeria, Mauritius	2
Good	Chad, Côte d'Ivoire, Gabon, Lesotho, Mauritania, Morocco, Rwanda, Tunisia	8
Weak	Angola, Djibouti, Kenya, Namibia, Senegal	5
Very Weak	Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Comoros, Congo, Democratic Republic of Congo, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Libya, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, Sao Tome & Principe, Sierra Leone, South Sudan, Somalia, Tanzania, Togo, Uganda, Zambia, Zimbabwe	35
Banned	Egypt, South Africa, Seychelles, Sudan	4

# *Promoting Quality Used Vehicles ... UNEP's Used Vehicles Programme*

- UNEP Proposal
  - EURO4 minimum harmonized standard
  - Meeting roadworthiness PTI at export
  - Age limit (5 yrs?)
  - Special focus on used (PH)Evs
- UNEP Programme
  - Support importers
  - And exporters
  - Priority Africa
  - Global solution



# Achievements pre UNRSF

- **2020 UNEP report “Used Vehicles and the Environment”** giving a global overview of the flow, scale and regulatory environment of the trade in used light duty vehicles
- UNEP issues a **2021 update LDV report**
- **UNEP launches a new global programme** to support the introduction of cleaner and safer used vehicles policies
- UNEA5.2 2022 adopts **resolution text** on used vehicles

# UNRSF Support

- 2021 UNRSF Used Vehicles I
  - Eastern and Southern Africa
  - USD 500K
  - UNECE, FIA, CITA, UNEP, with others
- 2022 UNRSF Used Vehicles II
  - Southern and Central Africa
  - And Asia (Cambodia & Mongolia)
  - USD 500K
- 2023 – LAC?
- Other support: FIA F, CWF, UNEP, CCAC, Netherlands

# Progress and Impacts

- **Importers**

- Country projects – many all regions
- Regional Agreements - minimum vehicle standards adopted in East (EAC) and West Africa (ECOWAS)

- **Exporters**

- EU has started consultations (new end-of-life vehicles directive)

- **Communication and knowledge materials** to raise awareness, and knowledge products on information sharing, inspection and monitoring framework developed and disseminated


# West Africa - ECOWAS clean fuels and vehicles directives

- September 2020 ECOWAS Council of Ministers adopted regionally harmonised fuel and vehicle standards
- New set of fuel quality standards
- EURO4 minimum vehicles emissions standards new & used vehicles
- Used vehicles age restrictions – 5yrs for LDV, 10yrs for HDV – 10 yrs to implement
- Adopted fuel economy roadmap



COMUNIDADE ECONOMICA DOS  
ESTADOS DA AFRICA OCIDENTAL

ECONOMIC COMMUNITY OF  
WEST AFRICAN STATES



COMMUNAUTE ECONOMIQUE  
DES ETATS DE L'AFRIQUE DE  
L'OUEST

Original: French

FIFTY-SEVENTH ORDINARY SESSION OF THE ECOWAS  
AUTHORITY OF HEADS OF STATE AND GOVERNMENT

7 September 2020, Niamey, Republic of Niger

---

**FINAL COMMUNIQUE**

---

1. The Fifty-seventh Ordinary Session of the Authority of Heads of State and Government of the Economic Community of West African States (ECOWAS) was held on 7 September 2020 in Niamey, Republic of Niger, under the chairmanship of **H.E. Issoufou Mahamadou**, President of the Republic of Niger and Chair of the Authority.

2. Present at the Summit were the under-listed ECOWAS Heads of State or their duly mandated representatives:


H.E Roch Marc Christian Kabore, President of Burkina Faso  
H.E Alassane Ouattara, President of the Republic of Cote d'Ivoire;  
H.E. Adama Barrow, President of the Republic of The Gambia;  
H.E Nana Addo Dankwa Akufo-Addo, President of the Republic of Ghana;  
H.E. Umaro Sissoco Embaló, President of Guinea Bissau;  
H.E Issoufou Mahamadou, President of the Republic of Niger;  
H.E Muhammadu Buhari, President of the Federal Republic of Nigeria;  
H.E Macky Sall, President of the Republic of Senegal;

Page | 1



# East Africa

- May 2022 East Africa Community Council of Ministers adopted regionally harmonised Euro 4/IV standards, and in-use vehicle emission limits
- After the EAC standard was gazetted early July, countries have 6 months to adopt standard as national law.
- UNEP support to Kenya and Rwanda
- 2019 Euro 4/IV standards were adopted by both countries
- Rwanda implementation ongoing (COVID delay)
- Kenya implementation date 1 July 2022 for imported used LDVs/MDVs
- import of used buses and trucks is to be banned to grow the local industry
- Court case halted implementation
- The EAC standard followed closely the Rwanda adopted standard as it included comments from WTO etc as it went through international process.
- In the meantime EAC harmonised standard May 2022. Kenya is aligning the national standard with the regional one and they plan to have this finalized and implemented end of the year.



Kenya Bureau of Standards  
Standards for Quality life  
Tel: 020 9948000 | Toll Free: 1545 | Email: [pyoc@kebs.org](mailto:pyoc@kebs.org) | [www.kebs.org](http://www.kebs.org)

**PUBLIC NOTICE ON IMPLEMENTATION OF KS 1515:2019**

Kenya Bureau of Standards (KEBS) is a statutory body established under the Standards Act, CAP 498, of the Laws of Kenya. KEBS is mandated to offer quality inspection of imports based on Kenya Standards or approved specifications among other services.

Following the declaration of **KS 1515: 2019 - Road Vehicles — Inspection of Road Vehicles — Code of Practice** as a mandatory Kenya Standard by the Cabinet Secretary for Industrialization, Trade and Enterprise Development, KEBS wishes to inform all stakeholders and the general public that effective 1<sup>st</sup> July 2022:


- All USED passenger Minibuses, Midibuses, Large buses, Single articulated and Bi-articulated buses and Double-decker buses shall not be allowed for importation into the country. However, used passenger Microbus (up to 7 m overall length) shall continue to be imported into the country provided they are NOT older than Eight (8) years from the year of first registration.
- All USED rigid Trucks with Gross Vehicle mass (GVM) equal to or greater than 3.5 tons and up to and including 30 tons shall not be allowed for importation into the country.
- Only tractor heads and Prime movers not older than three (3) years from the year of first registration shall be allowed for importation. This shall apply up to 30<sup>th</sup> June 2023 after which NO used tractor heads and prime movers shall be allowed for importation into the country.
- All other USED Road vehicles not mentioned above shall continue to be imported into the country provided that they are NOT older than eight (8) years from the year of first registration.
- All imported new diesel-powered, and petrol (gasoline) powered vehicles shall be type-approved to meet the requirements of EURO IV/4 before importation into the country.

Importers and members of the public are encouraged to buy the standard from the KEBS library or KEBS webstore - <https://webstore.kebs.org> to familiarize with the requirements of the standard.

For further clarification, please contact KEBS on Telephone +254 20 6948423 / 456 / 439 / 000 or E-mail: [pyoc@kebs.org](mailto:pyoc@kebs.org) or [info@kebs.org](mailto:info@kebs.org)

**MANAGING DIRECTOR**

KEBS implements an Anti-Corruption Management Policy accessible through KEBS Website [www.kebs.org](http://www.kebs.org)

[www.kebs.org](http://www.kebs.org) 

# SAFER AND CLEANER USED VEHICLES

Used Vehicles Information Sharing Systems with Data Support

SAFER AND CLEANER USED VEHICLES

Developed By:



**UN environment programme**

Africa has the highest road traffic fatality rates with 246,000 deaths each year. This number is projected to more than double to 514,000 in 2030.

SAFER AND CLEANER USED VEHICLES

ENVIRONNEMENT

### Le parc automobile mondial et la pollution atmosphérique

Le parc automobile mondial contribue largement à la pollution atmosphérique et au changement climatique car les émissions des véhicules sont, entre autres, une source importante de particules fines (PM<sub>2.5</sub>) et d'oxydes d'azote (NOx). Environ un quart des émissions mondiales de gaz à effet de serre sont dues au parc automobile mondial et ce chiffre devrait passer à un tiers d'ici 2050, soit une croissance plus rapide que pour tout autre secteur.

#### LA PART-PROPORTION DE VÉHICULES D'OCCASION

Les véhicules d'occasion jouent un rôle majeur dans l'approvisionnement de certains de problèmes de transport localisés et la réalisation des objectifs environnementaux mondiaux. En effet, ils représentent à l'échelle mondiale une part croissante du parc automobile dans les pays à revenu faible et intermédiaire.

La plupart des défis et solutions liés aux nouveaux véhicules ne sont pas différents de ceux liés aux véhicules d'occasion, mais ces derniers représentent également des défis spécifiques :

- Ils ne répondent souvent pas aux normes d'émissions des véhicules modernes.
- Beaucoup d'entre eux datent d'avant l'introduction des normes d'émissions des véhicules ou qui ne répondent qu'à des normes antérieures, telles que les normes Euro 1 à 3.
- Certains ont également des systèmes de contrôle des émissions endommagés ou défectueux, ce qui entraîne des émissions plus élevées de particules, de NOx, de CO et d'hydrocarbures, et un risque de fuite et de mauvais entretien des véhicules, l'économie de carburant et les émissions de CO<sub>2</sub> peuvent également être impactées négativement.



#### LE RÔLE DES PAYS EXPORTATEURS ET IMPORTATEURS

Les pays exportateurs et importateurs ont une responsabilité partagée pour améliorer et réglementer les véhicules d'occasion afin de minimiser leurs impacts négatifs. La croissance rapide des exportations de véhicules d'occasion vers les pays à revenu faible et intermédiaire représente un défi mondial majeur pour...

**UN environment programme**

## USED VEHICLES AND THE ENVIRONMENT

A Global Overview of Used Light Duty Vehicles: Flow, Scale and Regulation

# First African Used Vehicles Importers Meeting

DATE: 25 June 2021  
TIME: 12:00 - 3:00pm [east african time]

#cleannvehiclesforAfrica  
#safervehiclesforAfrica

SAFER AND CLEANER USED VEHICLES | RSF THE ROAD SAFETY FUND | UNECE | FIA | CITA | UN environment programme | ECA | African Union

SAFER AND CLEANER USED VEHICLES

### PROJECT AMBITION

A step further to achieve the 2030 Agenda for Sustainable Development by ensuring prosperous lives, promoting well-being, and making roads inclusive, safe, resilient, and sustainable.

A model that can be replicated in other regions facing similar challenges.

**UN environment programme**

## USED VEHICLES AND THE ENVIRONMENT

A Global Overview of Used Light Duty Vehicles: Flow, Scale and Regulation

Update and Progress 2021

# Benefit

*Going from: current situation mainly Euro 2&3; average age 18 yrs; no PTI  
To: minimum Euro 4; age ~8 yrs; valid PTI*

	Key Issue	Benefits
<b>Road safety</b>	Key safety equipment missing or removed – ABS, ESC, airbags; crumple zones	Crash avoidance (ABS); impacts improvements (ESC); reduced fatalities (Airbags); crumple zones (reduced fatalities) – together major reduction of crash impacts (~50%)
<b>Environment</b>	Exhaust filters faulty, missing or removed; reduced fuel economy	Common pollutants reduced by ~80-90%; increased efficiency/ reduced CO2 emissions – ~5-10%

# Next Steps

- Launch new used HDV report; prepare a LDV update report
- Continue to support importing countries adopt quality used vehicles standards
  - EAC / ECOWAS implementation support
  - SADC & ECCASS & Central America standards development
  - + several individual countries
- Develop a process for agreement exporting countries on minimum quality standards for used vehicles
  - EU\ US\ Korea\ Japan (+UK\ UEA)
  - Exporters meeting end 2023
- Political process for global agreement
  - UNEA6
- Other issues - circularity/ end-of-life issues

# Thank you

**Rob de Jong**

Head, Sustainable Mobility Unit

[rob.jong@un.org](mailto:rob.jong@un.org)

+254-710-602264 (m)

Twitter: [@Rob\\_AQMobility](https://twitter.com/Rob_AQMobility)

[www.unep.org/transport](http://www.unep.org/transport)

