

A photograph of a busy street in Africa, likely Lagos, Nigeria, showing a severe traffic jam. A man in a white suit is walking through the center of the road, holding a red and blue umbrella. The street is filled with cars, vans, and a white bus. The background shows trees and buildings under a hazy sky.

# A New Mobility Strategy for Africa

*Rob de Jong*  
Head Air Quality and Mobility Unit

# Challenges

# Air Pollution



## 'There is no escape': Nairobi's air pollution sparks Africa health warning

Pollution in the Kenyan capital is 'beyond imagination'. With Africa's predicted rise in population - and a constant stream of dirty secondhand cars from Europe and Japan - this urban health crisis could kill 1.5 million within a generation



Advertisement

100 RESILIENT CITIES

RESILIENT CITIES FOR THE 21ST CENTURY

JOIN THE GLOBAL CONVERSATION

# Congestion



# We lose N42bn monthly to traffic congestion in Lagos – Ambode

TRANSPORT DRIVING ⌚ October 8, 2014

Cairo's traffic problems are costing Egypt around 4 per cent of its GDP

## Traffic jams makes Nairobi world's 'second-worst' city

MONDAY APRIL 17 2017

TRAFFIC CONGESTION: BRINGING SA CITIES TO A HALT

General News



Congestion in Lusaka unbearable says Mwanakatwe after using public transport

September 15, 2017

1,629 views

# Road Safety



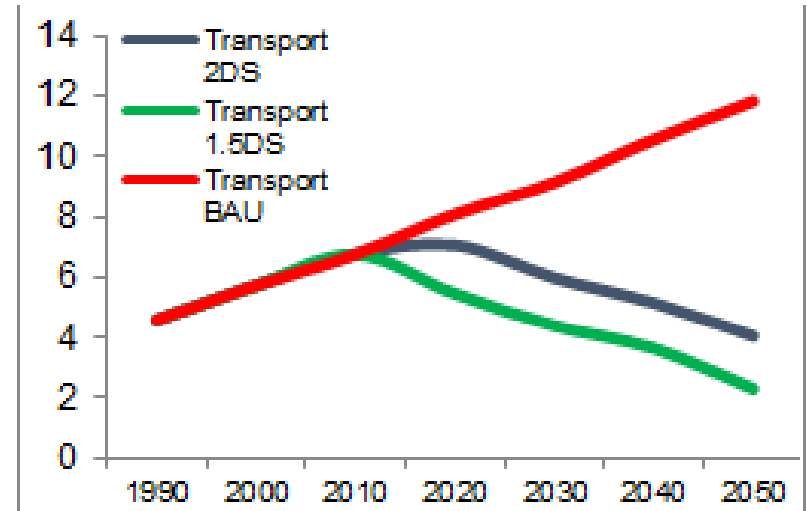
Country	Road fatalities per 100,000 motor vehicles
Africa	574
Eastern Mediterranean	139
Western Pacific	69
South-east Asia	101
Americas	33
Europe	19

Source: wikipedia



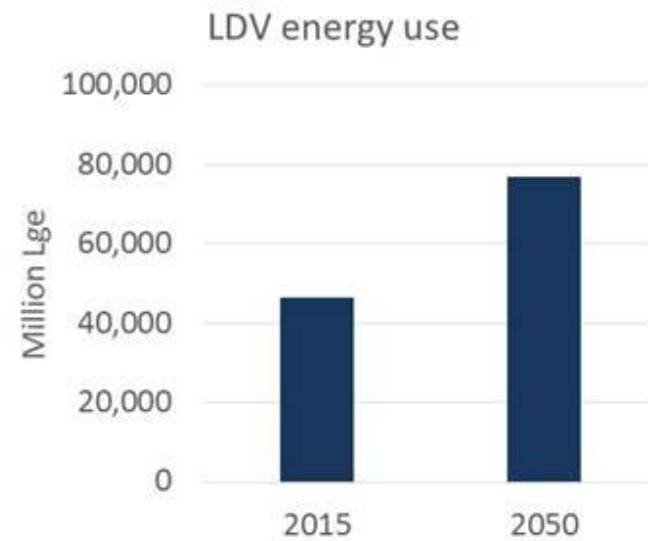
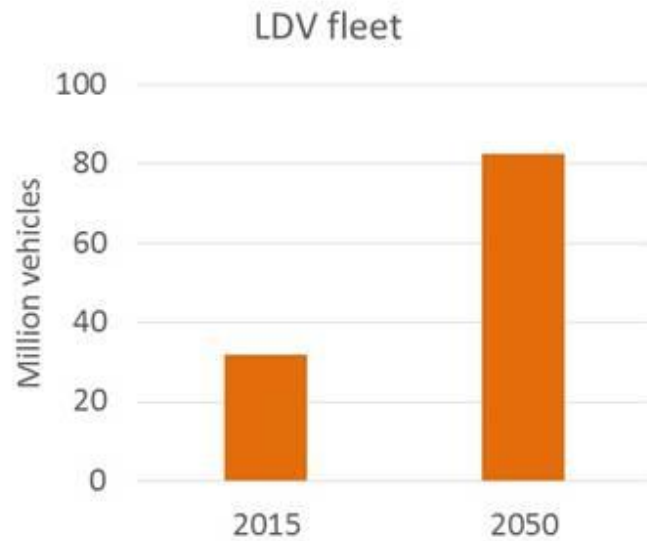
# Climate Change





Source: PPMC 2017; [www.ppmc-transport.org](http://www.ppmc-transport.org)

## *Africa's light duty vehicle fleet is set to triple by 2050*



Source: UN Environment E-Mob calculator(unpublished)

# **An Alternative Roadmap for Africa**

# Key Elements

## *1- Clean up Fleets*

- low sulfur fuels – 50/10ppm
- vehicles emissions standards – Euro 4/6
- used vehicles – clean rather than dirty

## *2- Zero & Low Emissions Mobility*

- electric motorcycles – switch
- cars & busses- electric/HEV/CNG – incentives

## *3- Walking and Cycling*

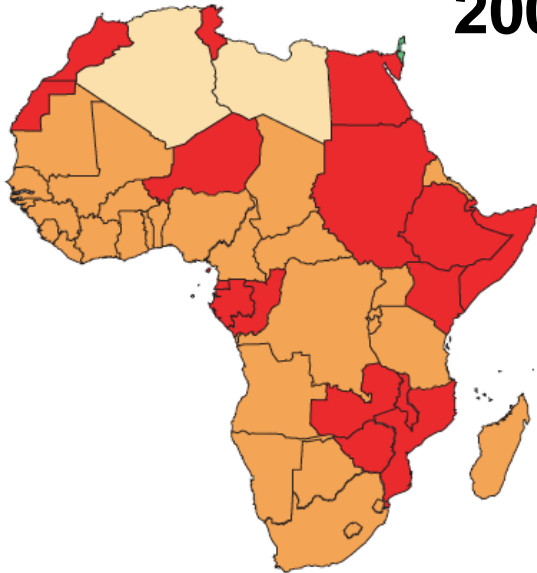
- Infrastructure – redesigning cities

## *4- Public Transport*

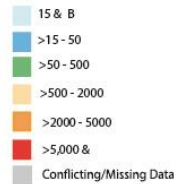
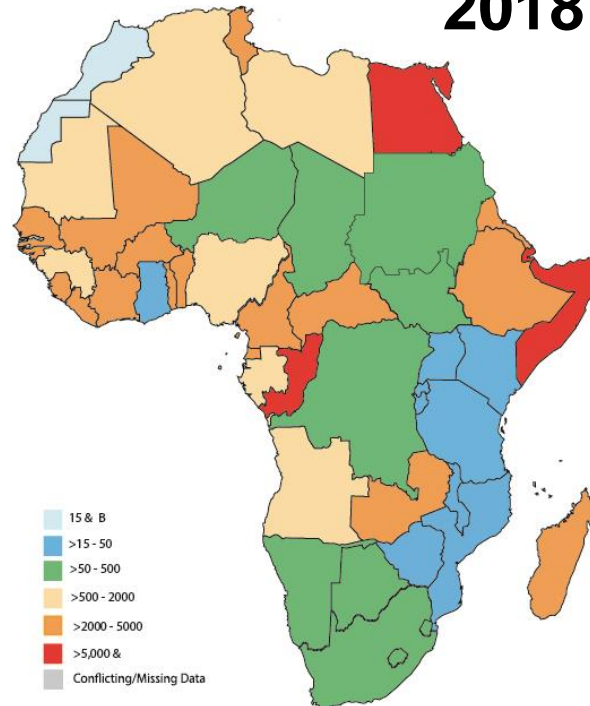
- mass transit medium & large cities (BRT/LRT)

# 1- Cleaning up Fleets

2002



2018

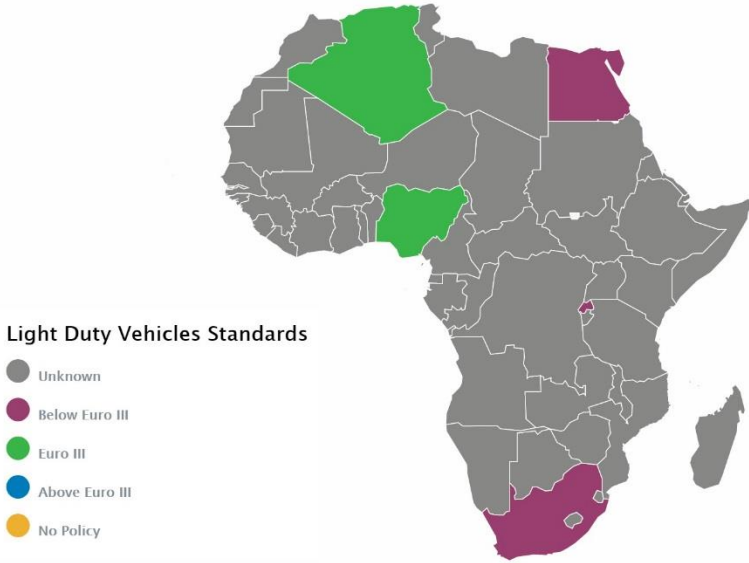


\* Information is in parts per million (ppm)  
For additional details and comments per country, visit [www.unep.org/transport/pcf](http://www.unep.org/transport/pcf)

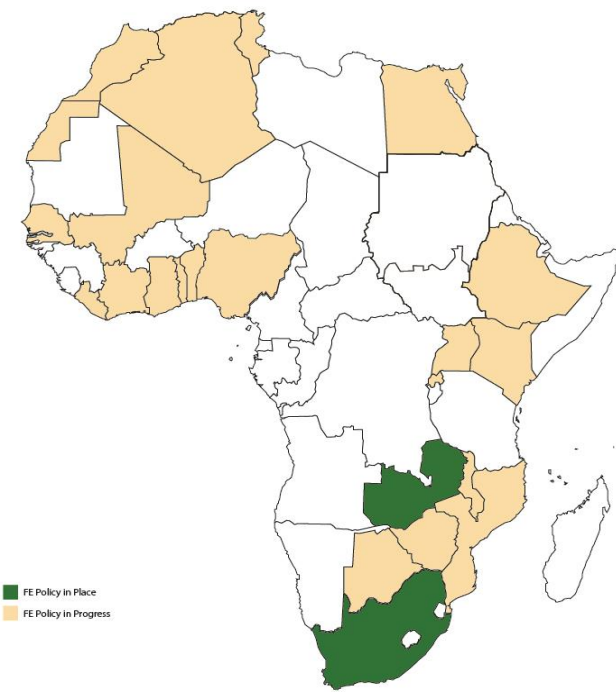
## UN Environment projects

#	Country
1	Algeria
2	Benin
3	Botswana
4	Burundi
5	Côte d'Ivoire
6	Djibouti
7	Egypt
8	Ethiopia
9	Ghana
10	Kenya
11	Liberia
12	Malawi
13	Mali
14	Mauritius
15	Morocco
16	Mozambique
17	Nigeria
18	Rwanda
19	South Africa
20	Tanzania
21	The Gambia
22	Togo
23	Tunisia
24	Uganda
25	Zambia
26	Zimbabwe

# Light Duty Vehicles Standards in Africa



# Global Progress on Fuel Economy Policy



For more information visit [www.globalfuelconomy.org](http://www.globalfuelconomy.org)

Global Fuel Economy Initiative (GFEI)

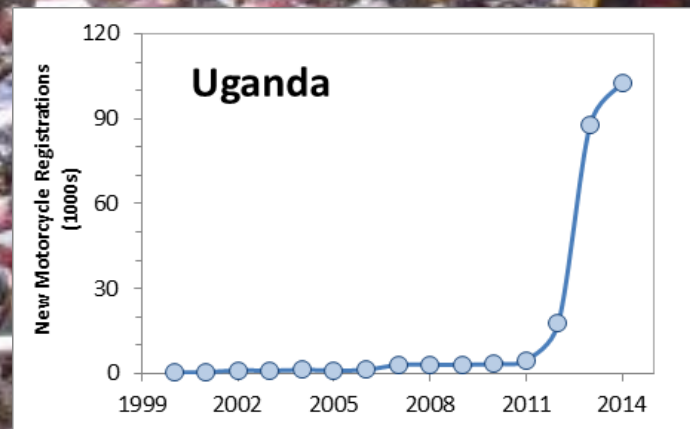
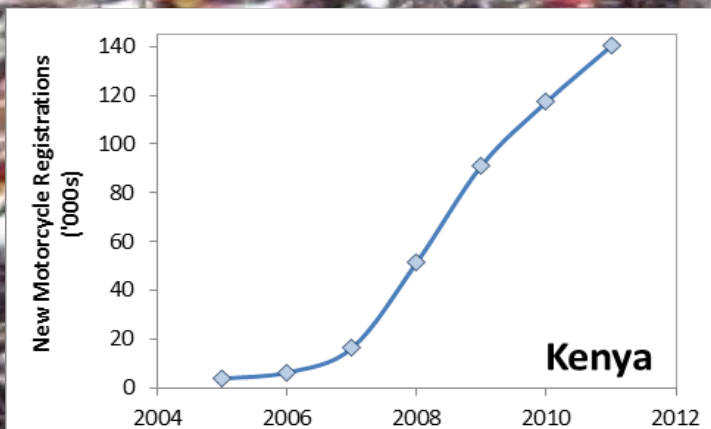
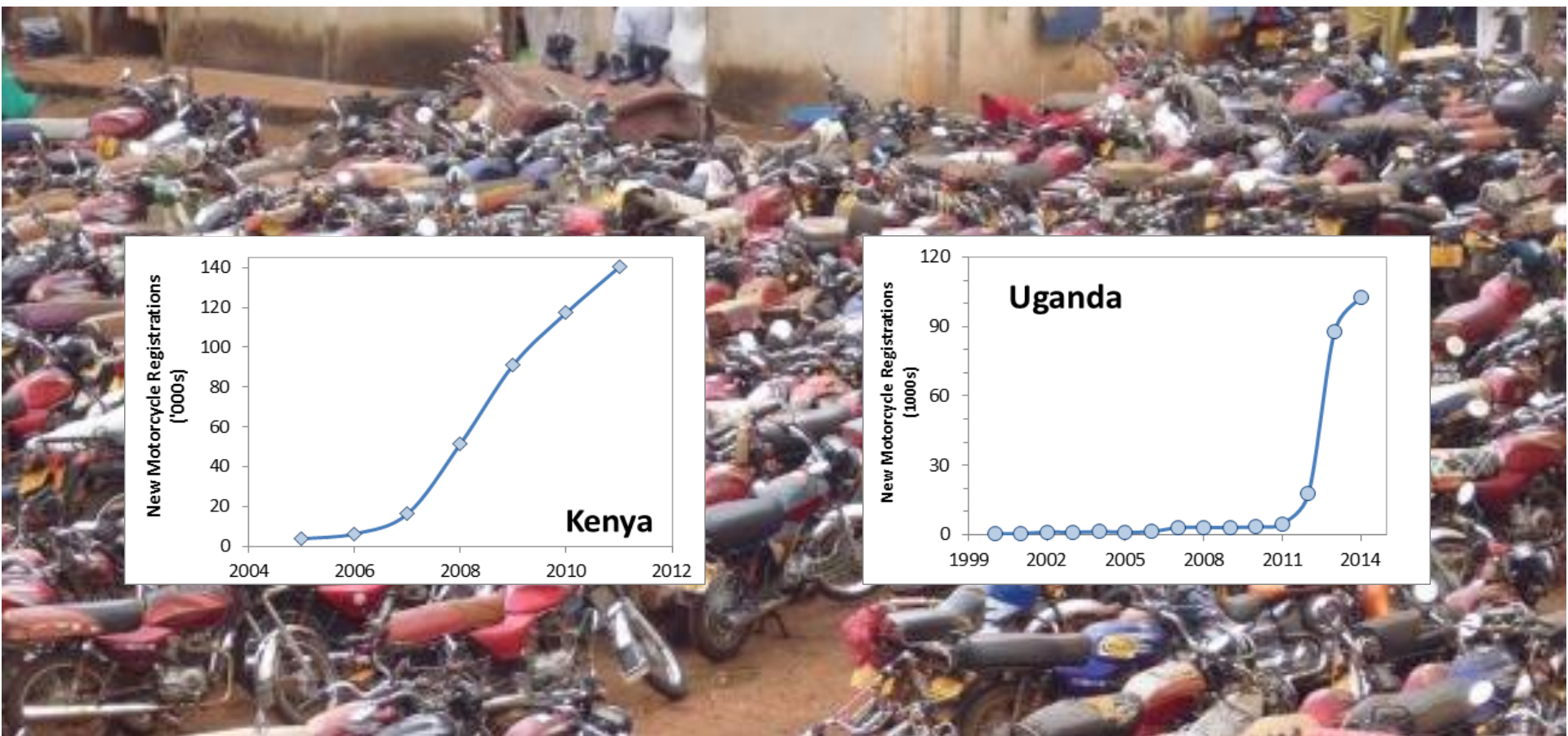
# used vehicles imports

Status of African Countries based on a recognized  
'strong' 5 year age limit



● Strong ● Fair ● Weak ● Banned

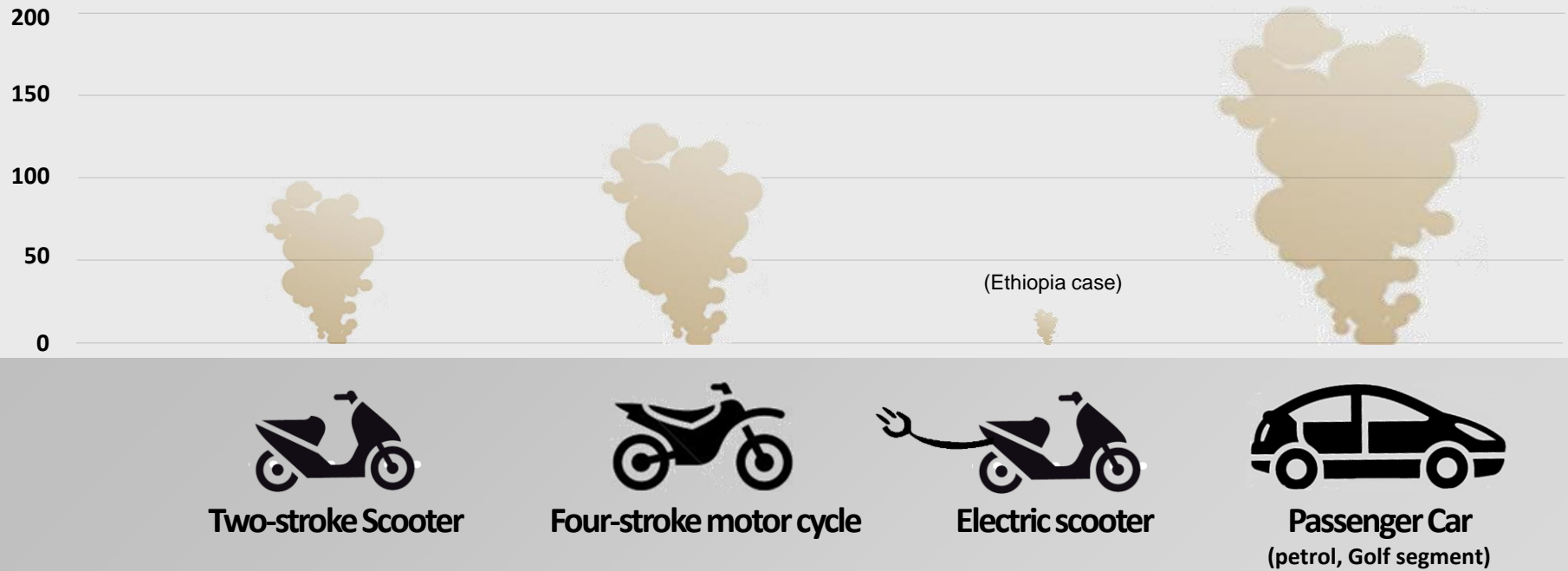
# 2- Electric Mobility



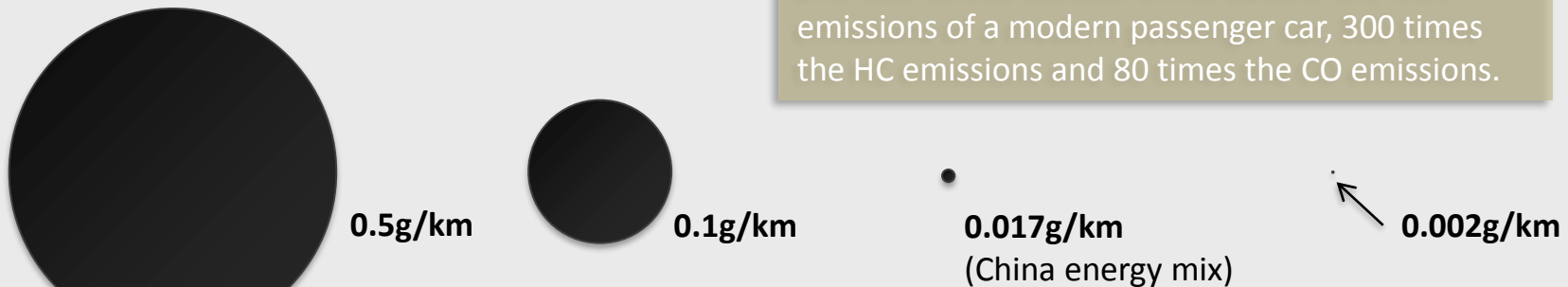


# Motorcycle Emissions

Two-wheelers Emissions Comparison – Total Emissions [g CO<sub>2</sub> –equivalents / km]



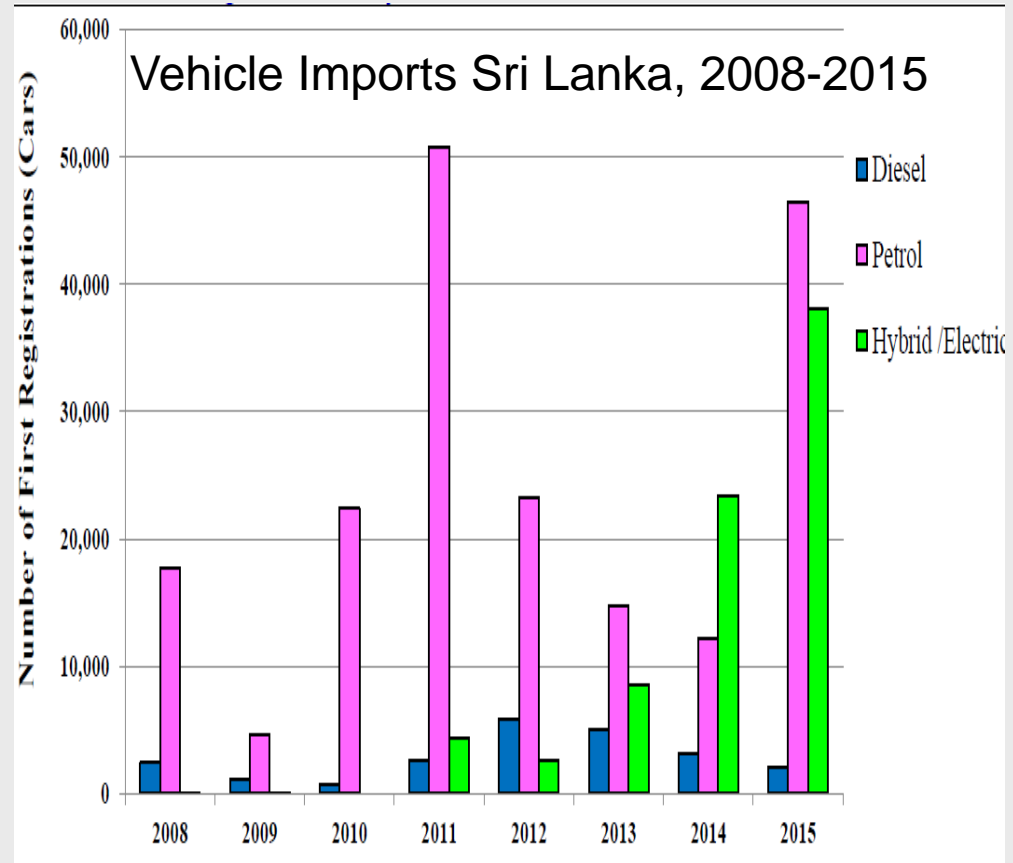
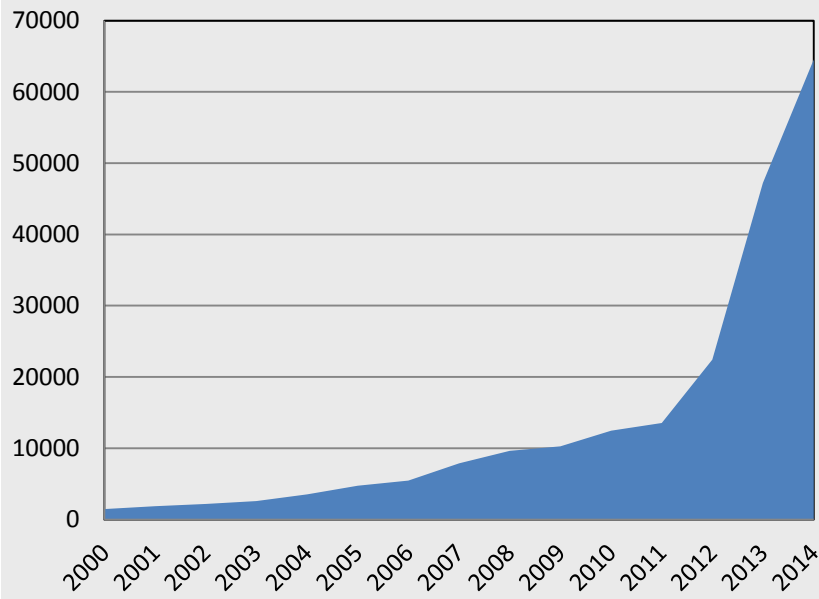
Particle Emissions [g PM/ km]



One two-stroke scooter emits double the NO<sub>x</sub> emissions of a modern passenger car, 300 times the HC emissions and 80 times the CO emissions.

# Import of Cleaner Vehicles

## Imported Vehicles in Uganda



# UN Environment Support to Electric Mobility Africa



# 3- Walking and Cycling





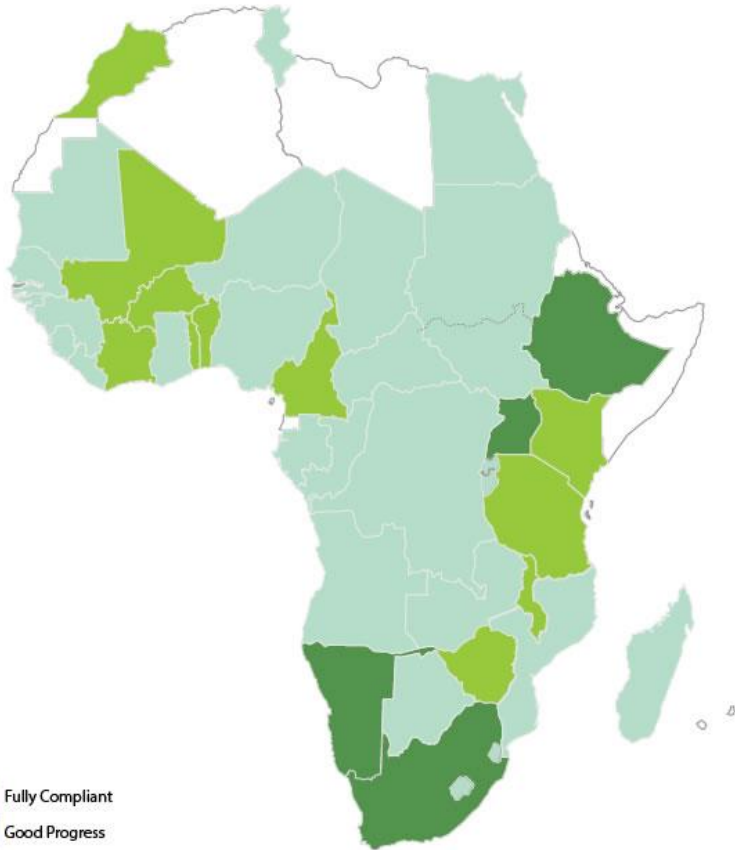
**before**



**after**



# UN Environment Support to Non Motorized Transport in Africa



COUNTRY	STATUS	ACTION
KENYA	Good Progress	Nairobi NMT Policy (discussions underway to upscale to national level)
UGANDA	Fully Compliant	National NMT Policy
BURUNDI	Some Progress	Commitment to develop National NMT Policy in 2017
RWANDA	Some Progress	Capacity Building undertaken
NIGERIA	Some Progress	Commitment to develop NMT policy for Lagos in 2016 and include in Federal Transport Policy
UGANDA	Some Progress	Commitment to develop NMT National policy in 2017

■ Fully Compliant  
■ Good Progress  
■ Some Progress  
■ No Data

# 4- Mass Transit/ Public Transport





Addis Ababa



Tunis



Casablanca



Dar es Salaam



Johannesburg



Lagos



# UN Environment Programs



Share the Road (StR)



Global Fuel Economy Initiative (GFEI)



Electric Mobility (EMOB)



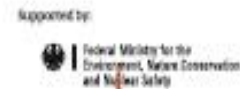
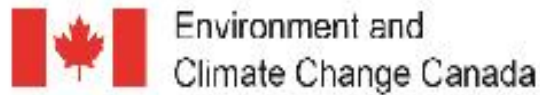
Partnership for Clean Fuels and Vehicles (PCFV)



Heavy Duty Vehicles Initiative  
Climate and Clean Air Coalition  
(CCAC)



# Partners



based on a decision of the Parliament of the Federal Republic of Germany



Thank you

Rob de Jong

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

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



United Nations  
Environment Programme