

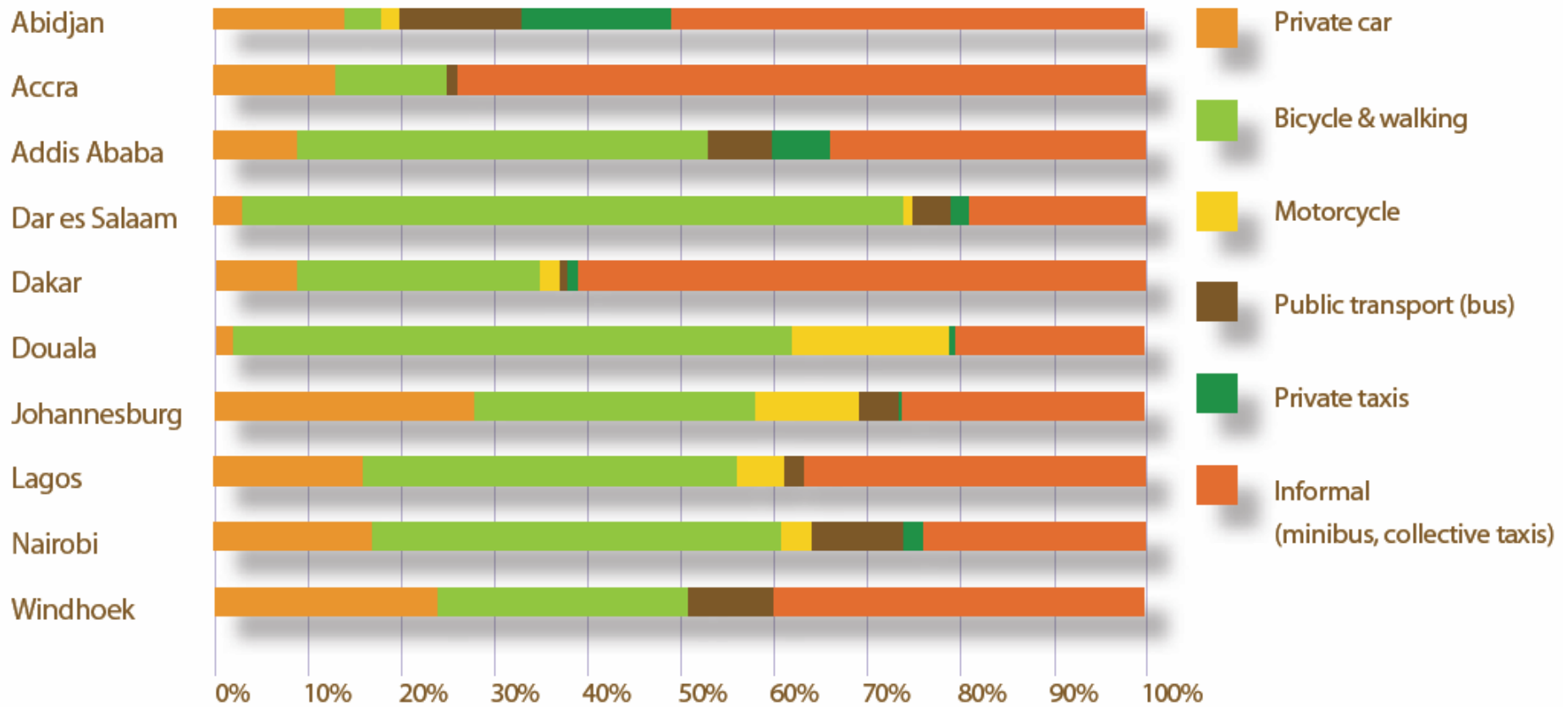
Efforts towards Cleaner Buses in Africa



Jane Akumu, UN Environment

Modal share

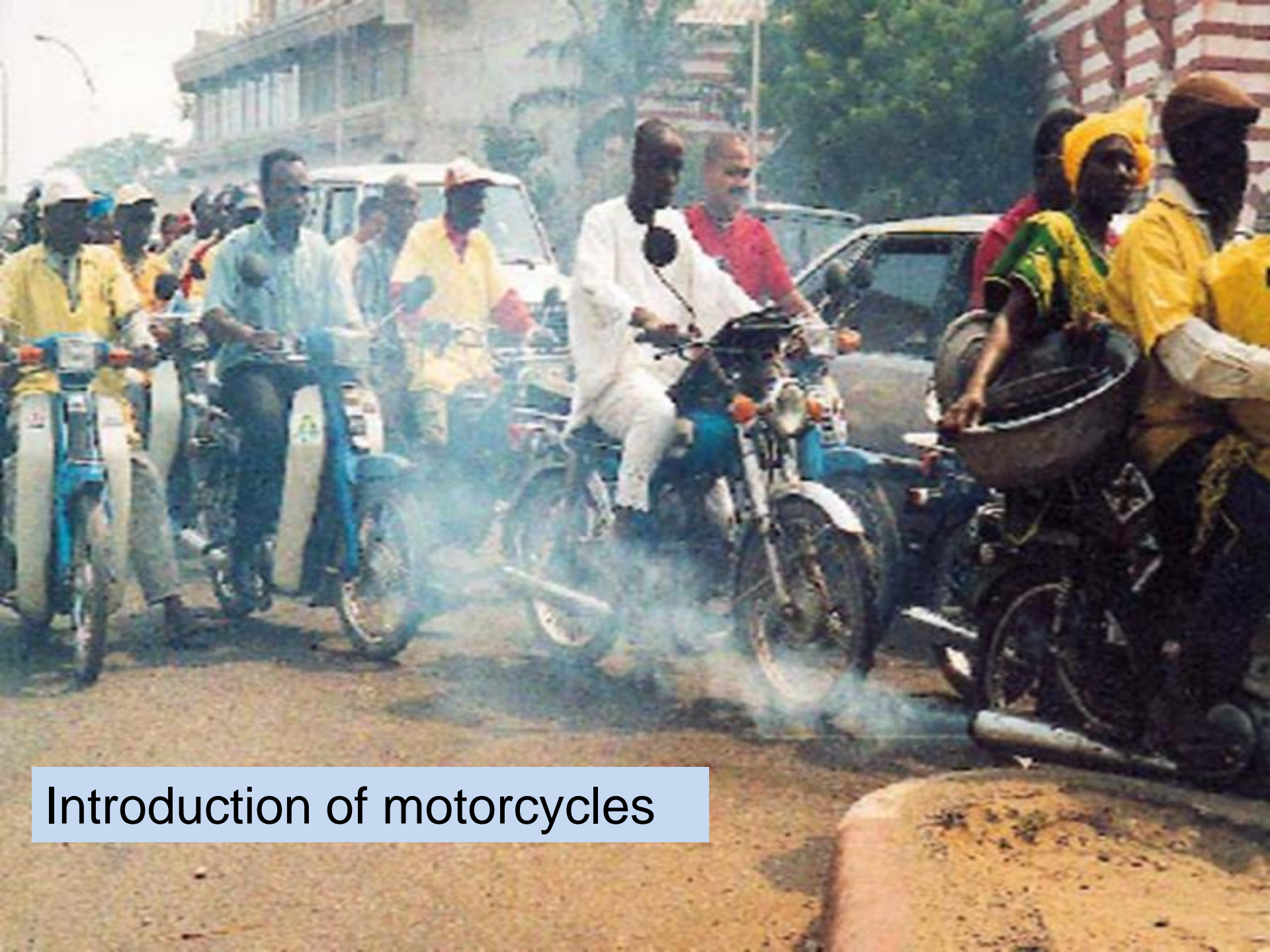
Transport modal share of the cities



Source: UATP (2010) Major Trends and Case Studies

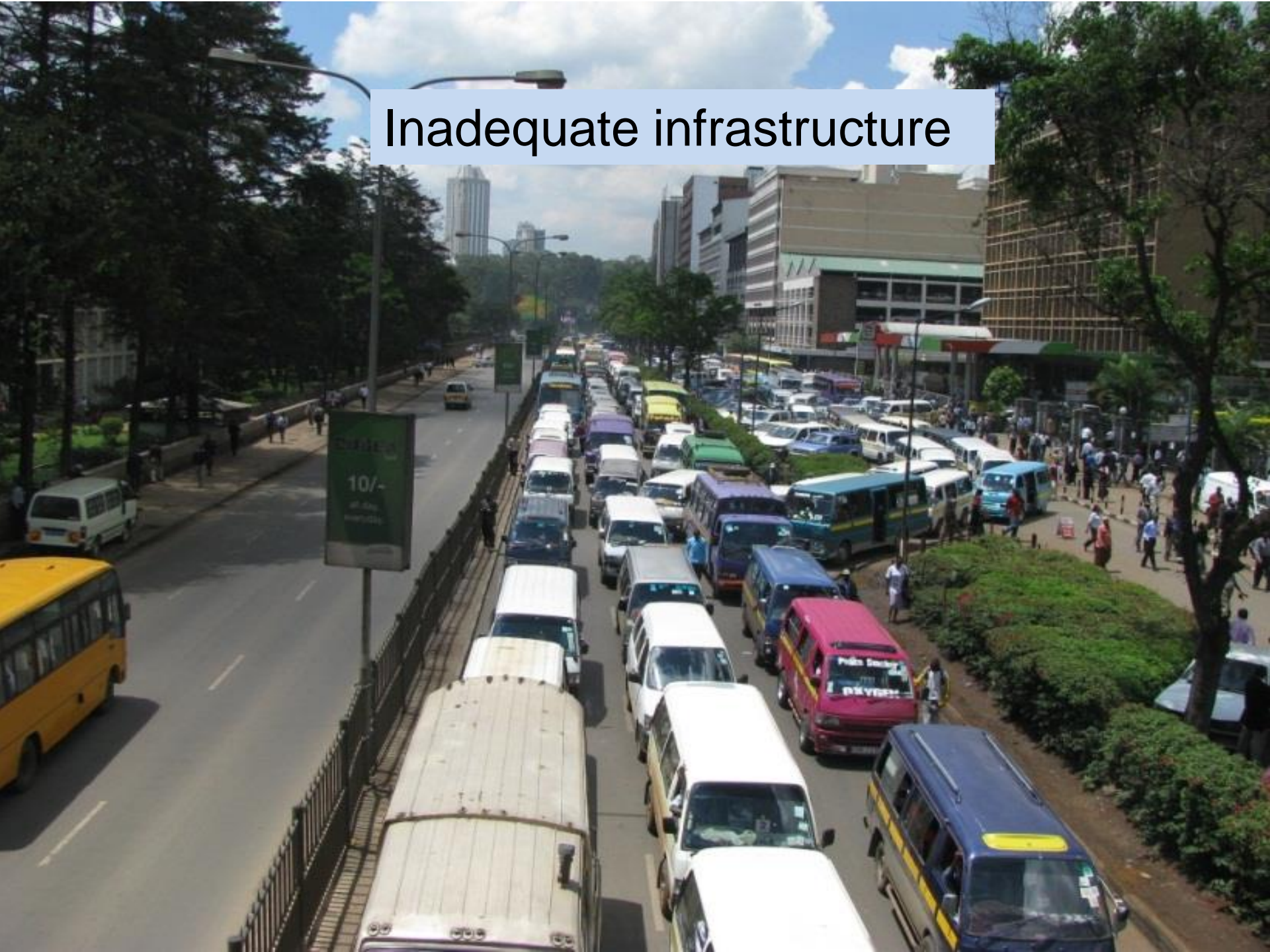
Efficient mass transport lacking





Introduction of motorcycles

Inadequate infrastructure

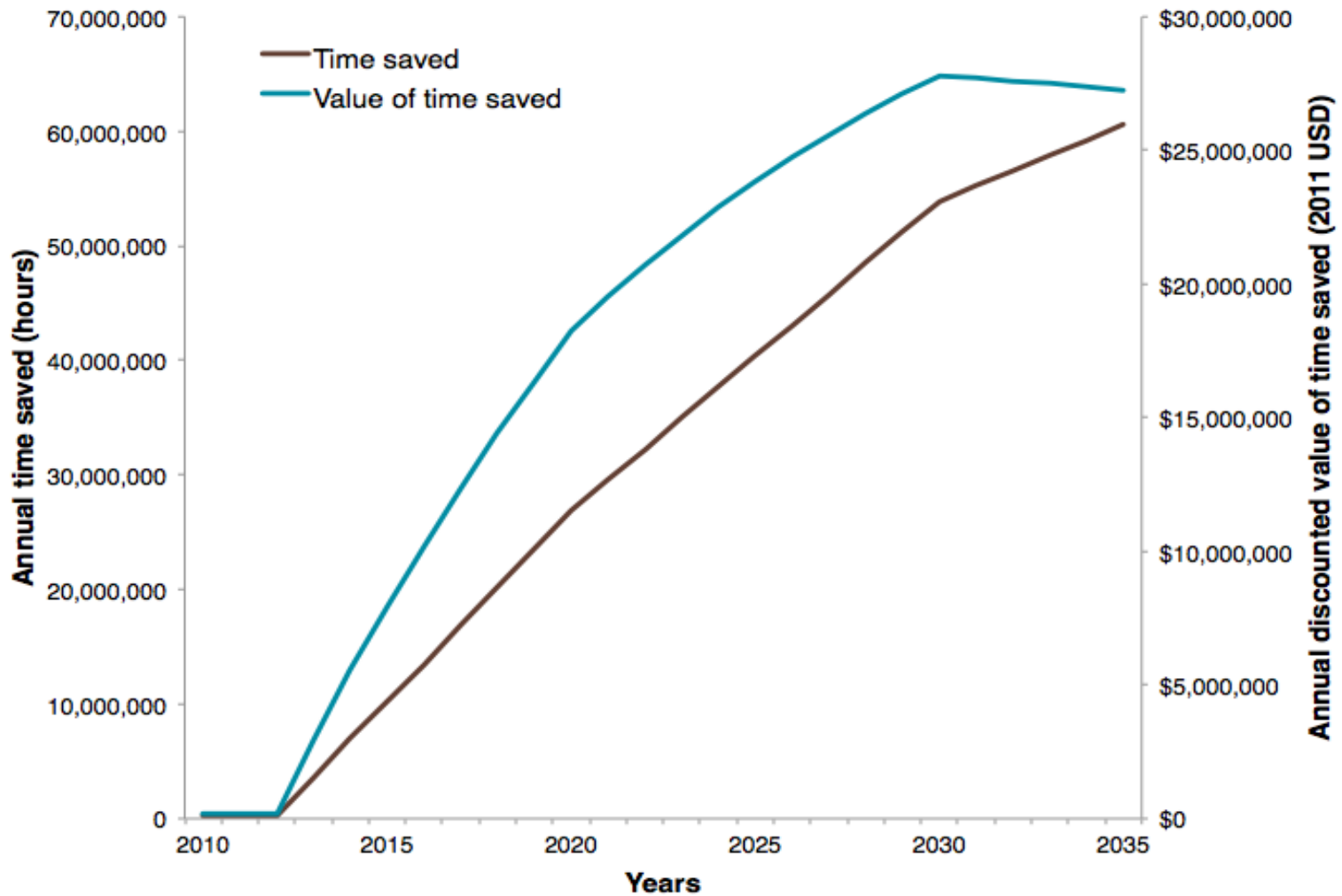


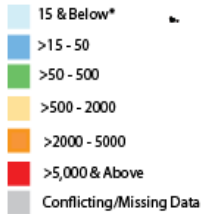
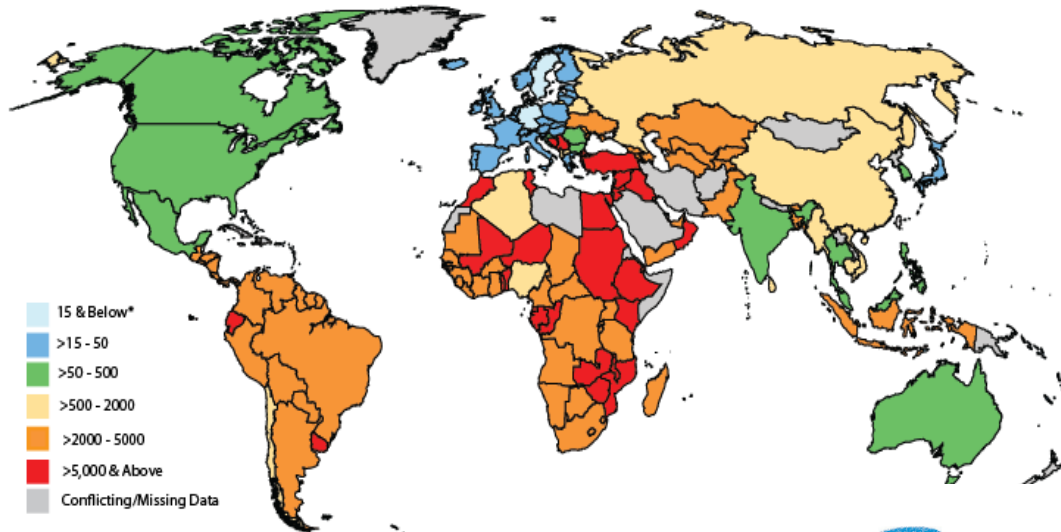
- Small particulates are responsible for an estimated 3.7 million premature deaths annually from outdoor air pollution.
- Heavy-duty trucks and buses currently account 80% + of PM2.5 emissions from on-road vehicles (ICCT 2013)
- **Exposure highest 300 - 500 meters from roadway** (HEI 2010)



Most African Cities planning BRTs

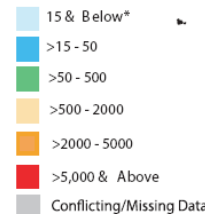
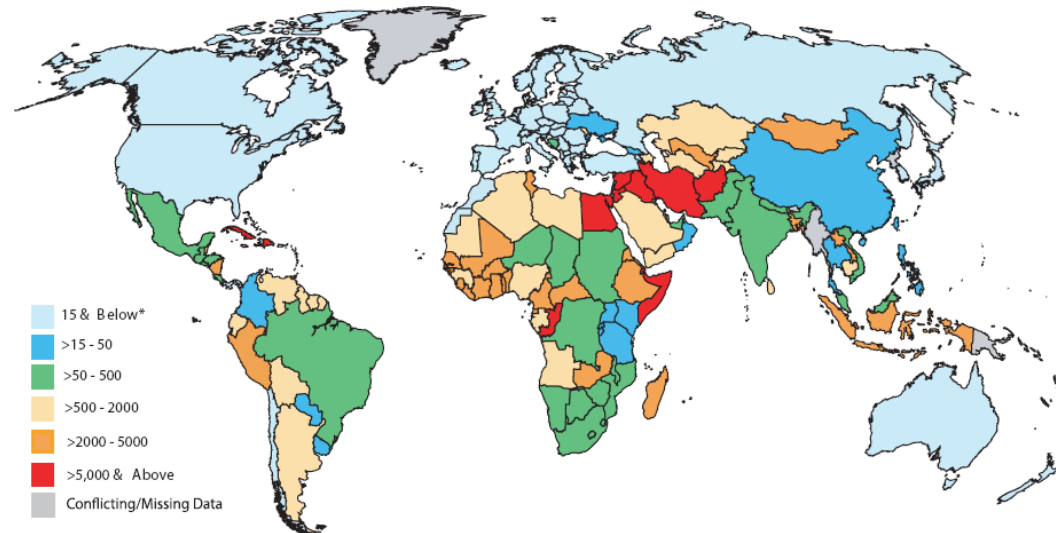
Nairobi: Annual travel time saved with BRT





* Information in parts per million (ppm)

Diesel Sulphur 2005 and 2017



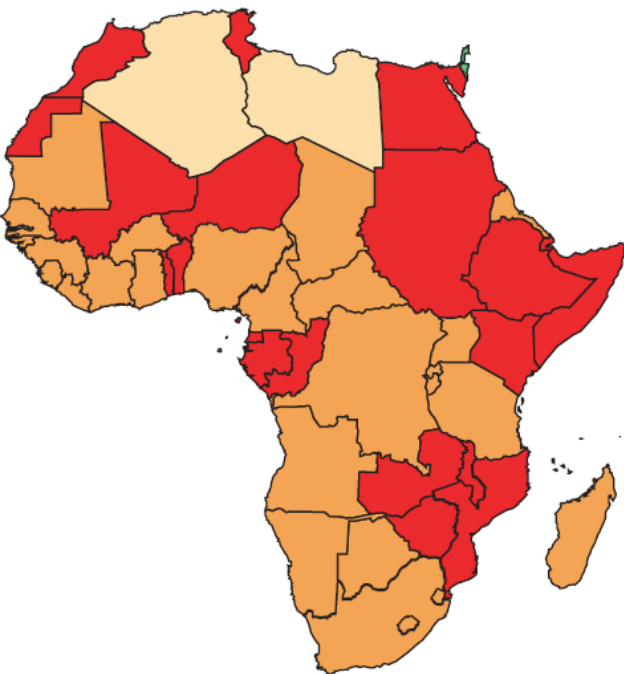
* Information in parts per million (ppm)

For additional details and comments per country, visit www.unep.org/transport/pcfiv/

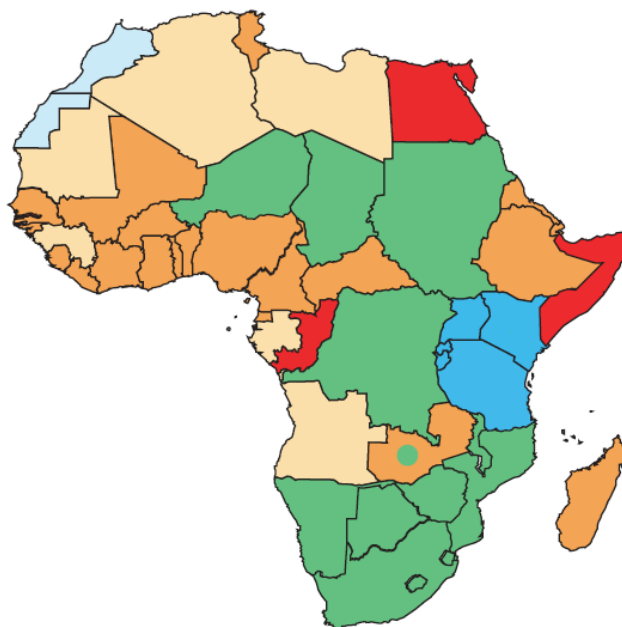
- 13 countries at 50 ppm & below
- More countries have lowered sulphur levels
- More cities at 50 ppm

Progress in Lowering Sulphur in Diesel in Africa

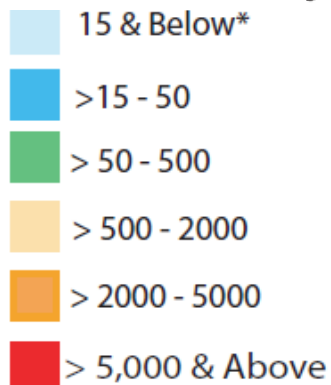
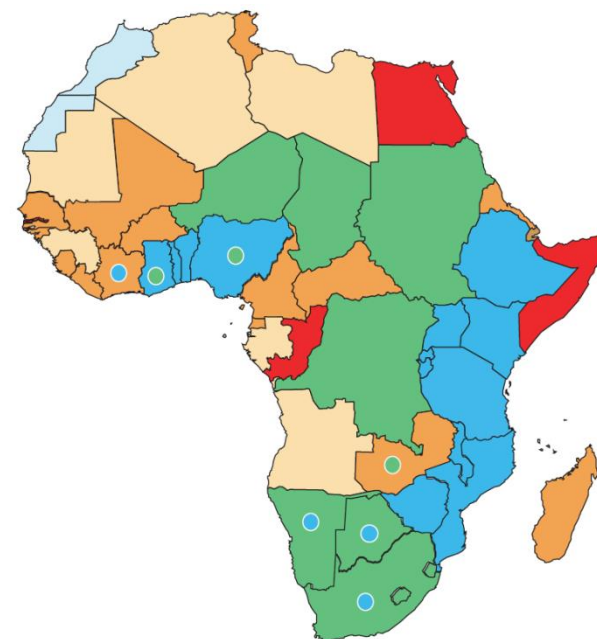
2002



2016



Planned 2017



* Information in parts per million (ppm)

Technology options: Overview



Diesel



LPG and CNG



Hybrid



Battery



Trolley



Capacitor

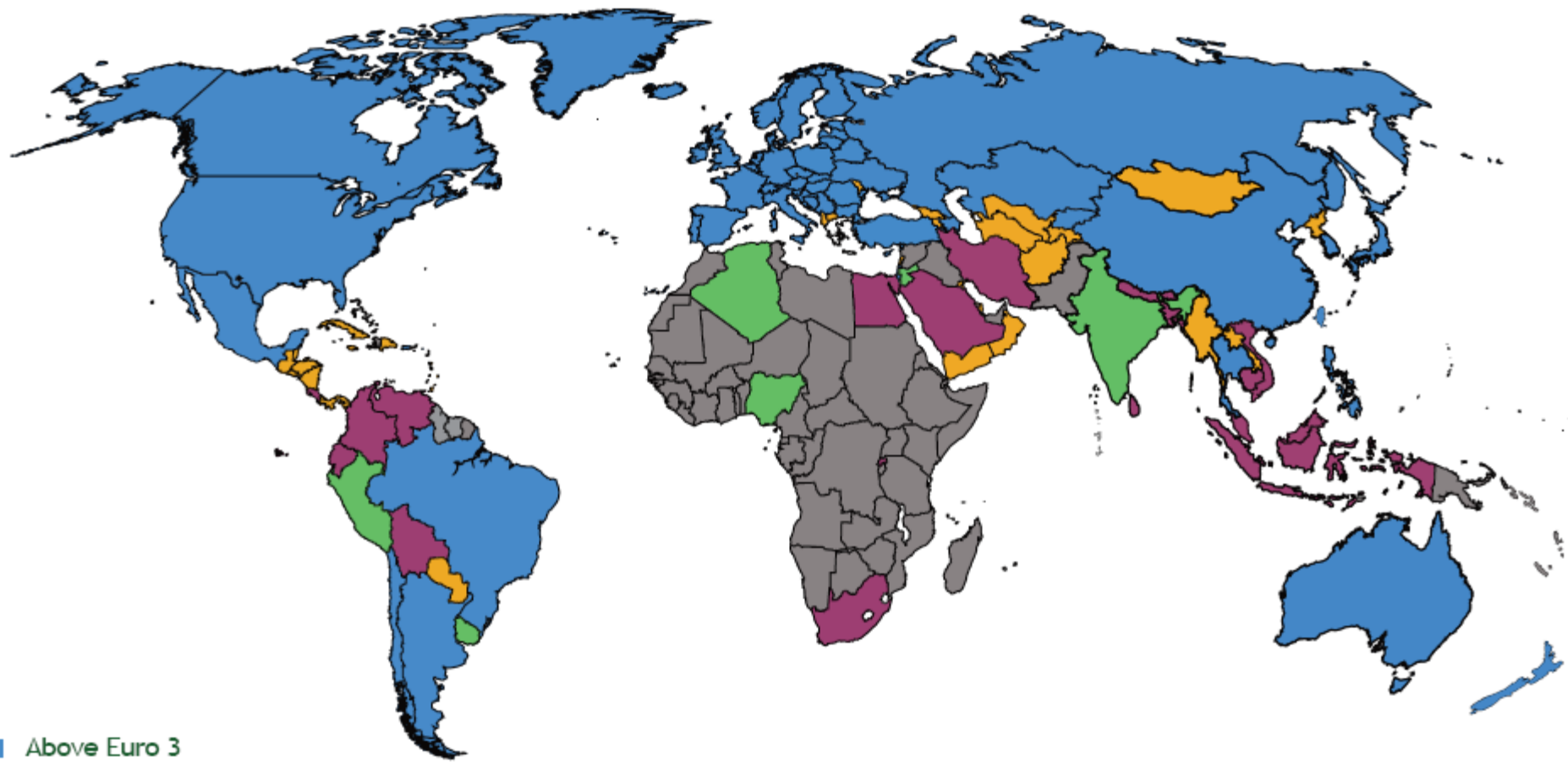


Fuel cell



Vehicle Emissions Standards

June 2017



- Above Euro 3
- Euro 3
- Below Euro 3
- No Policy
- Unkown

Good examples in the region



South Africa



Dar es Salaam



Lagos



Ethiopia



Next steps

- Cleaner fuels already available (50 ppm diesel fuels & CNG)
- Commitment by cities to procure cleaner, soot-free buses



UN Environment Transport Programmes



Share the Road (StR)



Global Fuel Economy Initiative (GFEI)



Electric Mobility



Partnership for Clean Fuels and Vehicles (PCFV)



Climate and Clean Air Coalition (CCAC)



A yellow sign is mounted on the side of a bus. The sign features bold black text and a logo. The bus's body is dark blue or black, with several rectangular reflective markers (two red and one white) visible on either side of the sign. Below the sign, a portion of a New York license plate is visible, showing the text 'NEW YORK' and '100051'.

**Standing behind this bus
could be more dangerous than
standing in front of it.**

**NY
DC**

Diesel fumes can kill. Demand clean-fuel buses. Call 1-800-NICE-RIDE.

National Association
of Clean Air Advocates

Jane Akumu

www.unep.org/transport

<http://www.ccacoalition.org/>