

# Air Quality and Mobility

## - Challenges and Initiatives-



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# Health and Economic Costs

*“Particulate matter affects more people than any other pollutant” – WHO 2011*

- Small particulates (PM10 or PM2.5) estimated to cause over **3.2 million premature deaths per year** worldwide;
- In 2012, diesel PM was officially classified as **carcinogenic** (WHO);
- The smaller part of PM is **black carbon (BC)**, now believed the **second most important climate pollutant**;
- Vehicular emissions, esp diesel vehicles, are responsible for 50-80% of the PM/ BC pollution in cities

- 2012 WHO estimates 176,000 deaths per year in Africa due to outdoor air pollution
- 600,000 deaths per year from household air pollution
- Cost of air pollution in African cities can be as high as **2.7% of GDP**
- Recent University of Nairobi study: economic loss per year due to vehicle emissions is **115 billion shillings (1.3 million USD)**

# Situation in Africa

- Urbanization – and lack of urban planning
- Motorization
- Poor fuel quality
- No vehicles policies
- Chaotic, expensive, unregulated dirty public transport
- No mass transit
- Massive congestion
- No non-motorized transport infrastructure
- Road accidents
- Rapidly deteriorating air pollution















# The Africa Sustainable Transport Forum (ASTF)





# The ASTF 1<sup>st</sup> Ministerial and Experts Meeting

- Formally opened by UN SG Mr. Ban Ki-moon and His Excellency Uhuru Kenyatta, President of Kenya
- Over 250 participants
- 43 African Countries Represented
- 19 Ministers of both Environment and Transport Ministries

The ASTF Meeting was held from 28 to 30 October 2014 at UNEP HQs in Kenya with Ministers adopting the **ASTF Action Framework**. The Action Framework represents the **priority areas** for action in relation to sustainable transport



# The ASTF Action Framework – 13 Points of Action

ASTF Action Framework		
Priority Action Areas		
Priority Area	Actions	Time-Bound Target
Road safety	Implement the African Action Plan for the Decade of Action for Road Safety 2011 – 2020	
	Set up dedicated institutions for road safety and allocate funding	2017
	Insure comprehensive data collection and reporting mechanisms on road safety incidents and trends	2015
	Develop and adopt a Non-Motorised Transport Policy	2015
	Develop and adopt Non-Motorised Transport Design Guidelines	2015
Vehicle Emissions and Energy Efficiency	Ensure air quality monitoring takes place in all main cities	2017
	Develop vehicle emission standards and suitable inspection and testing	2016
	Develop vehicle import regulations at both regional and national levels, based on either vehicle age, mileage or emissions	2016
	Develop regulations for the adoption of cleaner fuels - especially low sulphur fuels - at a national level	2017
	Undertake a country level fuel economy analysis and develop a national level policy to improve fuel economy	2017
Accessibility and sustainable infrastructure	Develop a national policy on sustainable urban transport	2017
	Develop integrated transport plans with a specific focus on multi-modal transport	2018
	Undertake an assessment and develop a national policy on mass-transit systems	2017



## ASTF – Next Steps

- Spreading the Word
- Securing buy in from Transport and Environment Ministers
- Identification of Implementing Partners
- Gathering baseline data information and reporting on progress made against baselines
- Developing and managing an information hub for sharing of best practices, progress etc.

# Good News – Best Practices in Africa

- Unleaded fuel
- Low sulfur fuels
- Importation restrictions
- BRT and light rail
- NMT policies, national and municipal
- Vehicles policies and standards
- Road safety key issue













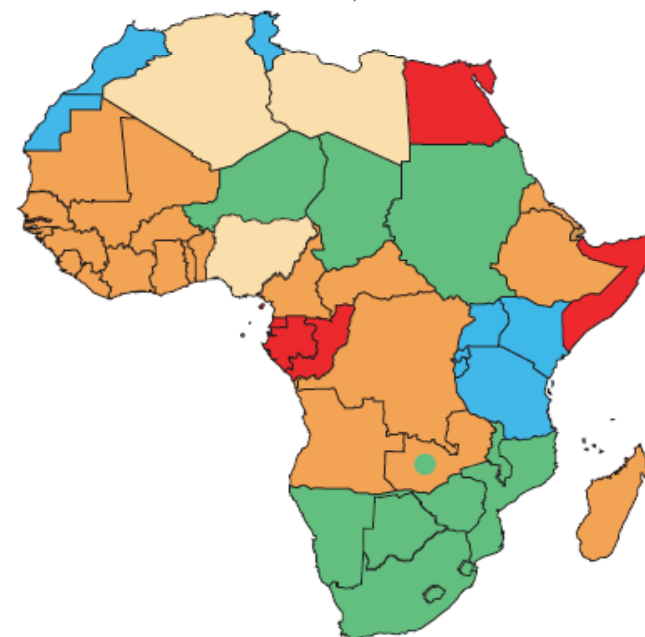
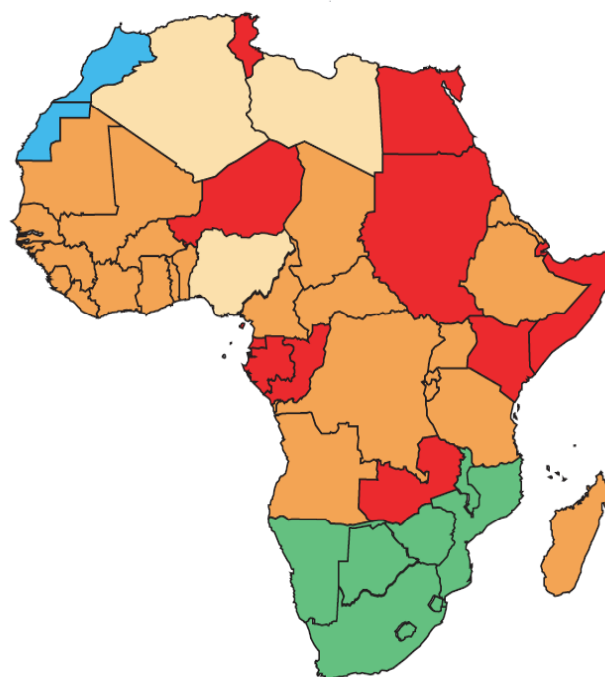
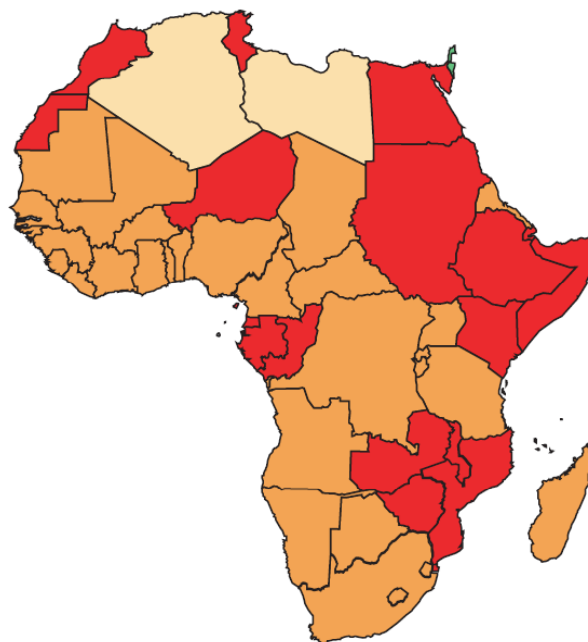
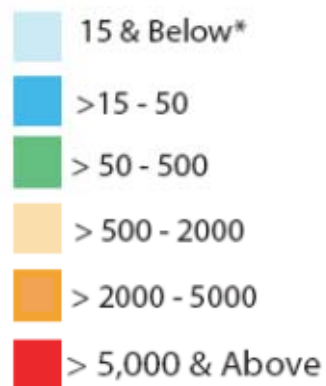


# Progress in Lowering Sulphur in Diesel in Africa

2002

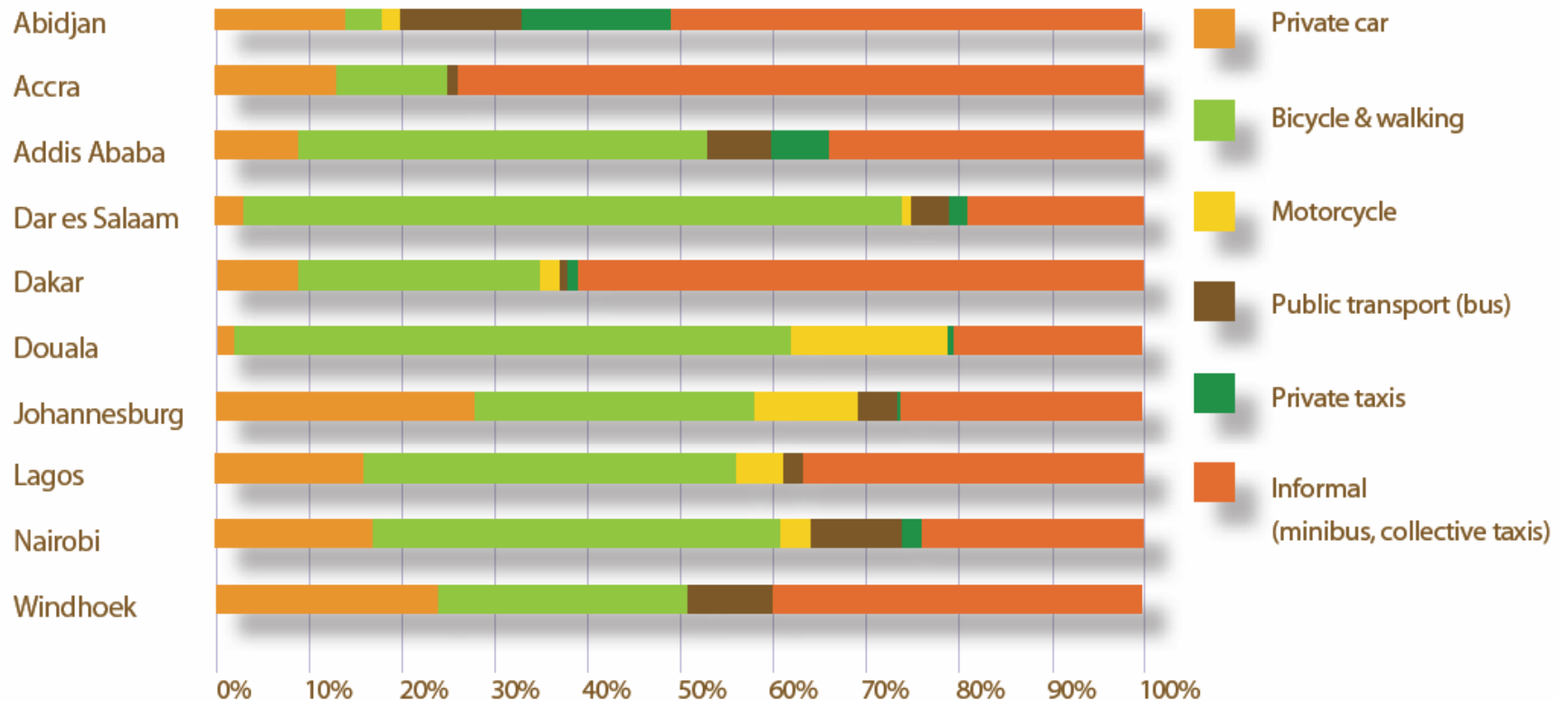
February 2009

2015





## Transport modal share of the cities



Source: UATP (2010) Major Trends and Case Studies



# UNEP's Transport Programmes



Share the Road (StR)



Global Fuel Economy Initiative (GFEI)



Partnership for Clean Fuels and Vehicles (PCFV)



UNEA – Air Quality Resolution



Los Angeles, 1948



Beijing, 2013

**?**

*Nairobi in 5 to 10  
years?*





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