Experience of African Countries in Developing Fuel Economy Baselines and Trends:

EGYPT

Eng. Ahmed El-Dorghamy
Center for Environment and Development for the Arab Region and Europe (CEDARE)
AFRICA CLEAN MOBILITY WEEK
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CEDARE’s current activities in sustainable transport:

- E-mobility
- Replacement schemes
- Modal shift
- Capacity building & awareness
- Policy development

... future prospects: e-mobility, replacement schemes, modal shift, capacity building & awareness, policy development ...
Baseline study results:
Average fuel economy (l/100km) of new Light Duty Vehicles

- Egypt
- Tunisia
- Morocco

4 l/100km Target
Where does this fall within national priorities?
Licensed vehicles in Egypt in 2017

~9.3 Million vehicles

~45 cars/1000 inhab.

Growing local (partial) production

Aging stock / EXTENDED life

20-yr limit on public-transport vehicles there, but difficult to really enforce!

New traffic law in the parliament = opportunity for technical assistance in the subsequent executive regulations.
**Local Pollution:**
Source-attribution of PM10 air pollution in Cairo dominated by vehicle emissions

- **Vehicle Emissions:** 32%
- **Open Burning:** 30%
- **Secondary PM, Vehic. & Indust.:** 18%
- **Sand & Soil Dust:** 9%
- **Copper Foundries:** 1%
- **Lead Smelters:** 3%
- **Mazout Burning:** 3%
- **Iron & Steel Industry:** 2%
- **PM from Marine Salts:** 2%
- **Cement:** 0.2%
Diesel in heavy duty vehicles

Diesel Fuel Sulphur Levels: Global Status
December 2016

* Information in parts per million (ppm)
For additional details and comments per country, visit www.unep.org/transport/pdfr/
Social impact

Mode Split in Greater Cairo

- 3.2 million trips/day (almost entirely walking)
- 22.4 million trips/day

Motorized transport: 87%
- Public transport: 63%
- Microbus: 63%
- Metro: 21%
- Other: 0.1%
- Taxi: 7%
- School/Employer bus: 7%
- Motorcycle: 0.7%

Non-motorized transport (NMT): 13%
- 44.1 million trips/day

44.1 million trips/day
Cultural heritage, sensitive ecosystems, tourism, and other concerns...

Air pollution among the drivers of the historical 2006 relocation of Ramses II
Growing interest in E-mobility

Case study of Alexandria Passenger Transport Authority

Planning

• Since 2016 APTA had been planning sustainable mobility plans; highlights included the upgrade of existing tramline system, rehabilitating the rolling stock that was burnt down during the 2011 revolution (with local capacity and resources), and introducing full-electric buses.
• A plan and proposal was submitted to the Ministry of Planning for discussion and approval.

Tendering

• For the electric buses, a local tender was first conducted to prioritize potential local suppliers (as per national regulations), and it was confirmed that local supply is not available.
• An international tender was then conducted throughout 2017, for which 7 companies applied out of 17 companies invited.

Launching

• The tender was successfully awarded; an agreement was signed on January 2018 with BYD for 15 low-cost 12-meter K9 pure electric buses and 18 charging poles.
• The first (trial) bus is scheduled to come into operation in June 2018 for evaluation and approval before subsequent supply of the rest of the fleet later in 2018. The fleet shall be the first of its kind in Egypt.

Prospects

• Evaluation of experience with electric buses and expansion of fleets and infrastructure, including exploration of possibility of retrofitting old buses and/or enhancing partial local production.
• Exploration of possibilities for integrating solar power (including feed-in), improving local capacity for upgrading the tram system and rolling stock, developing an integrated ticketing system for formal public transport. For the latter, an MoU is already signed for international development assistance and private sector partnership to study and help develop intermodal integration.
Thank you...