



.....insights from.....

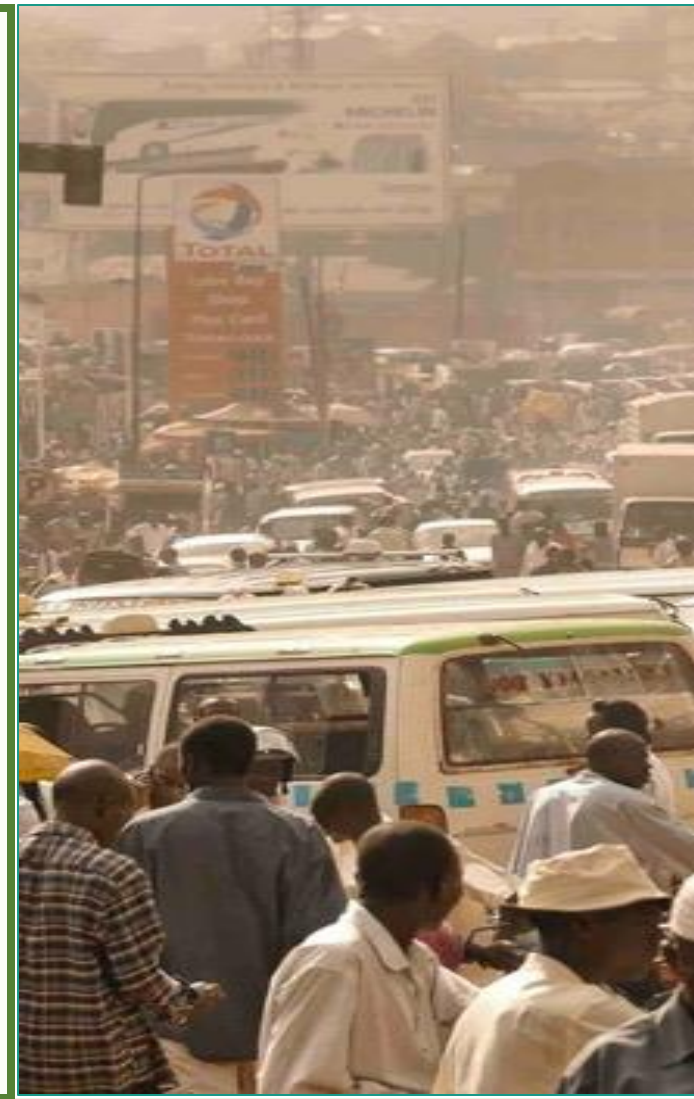


Tackling Africa's Road Transport Emissions From The Source

Presented by

Michael Wanyama

michael@autosafety-ug.org



Jan 2025



Current
Intervention
strategies have
loopholes and
data is limited

(Gov'ts, Dev.
Partners, etc)

There's limited
capacity for best
practices around
the automobile
maintenance
sector

(Repair shops,
Institutions..)

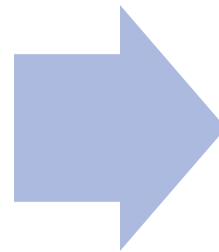
Africa's high demand for
used vehicles fueling
pollution; hindering
climate action and
deteriorating public
health. Over 31,000 lost
to air pollution related
illnesses in Uganda alone



Poor maintenance driving Africa's emissions beyond available data??



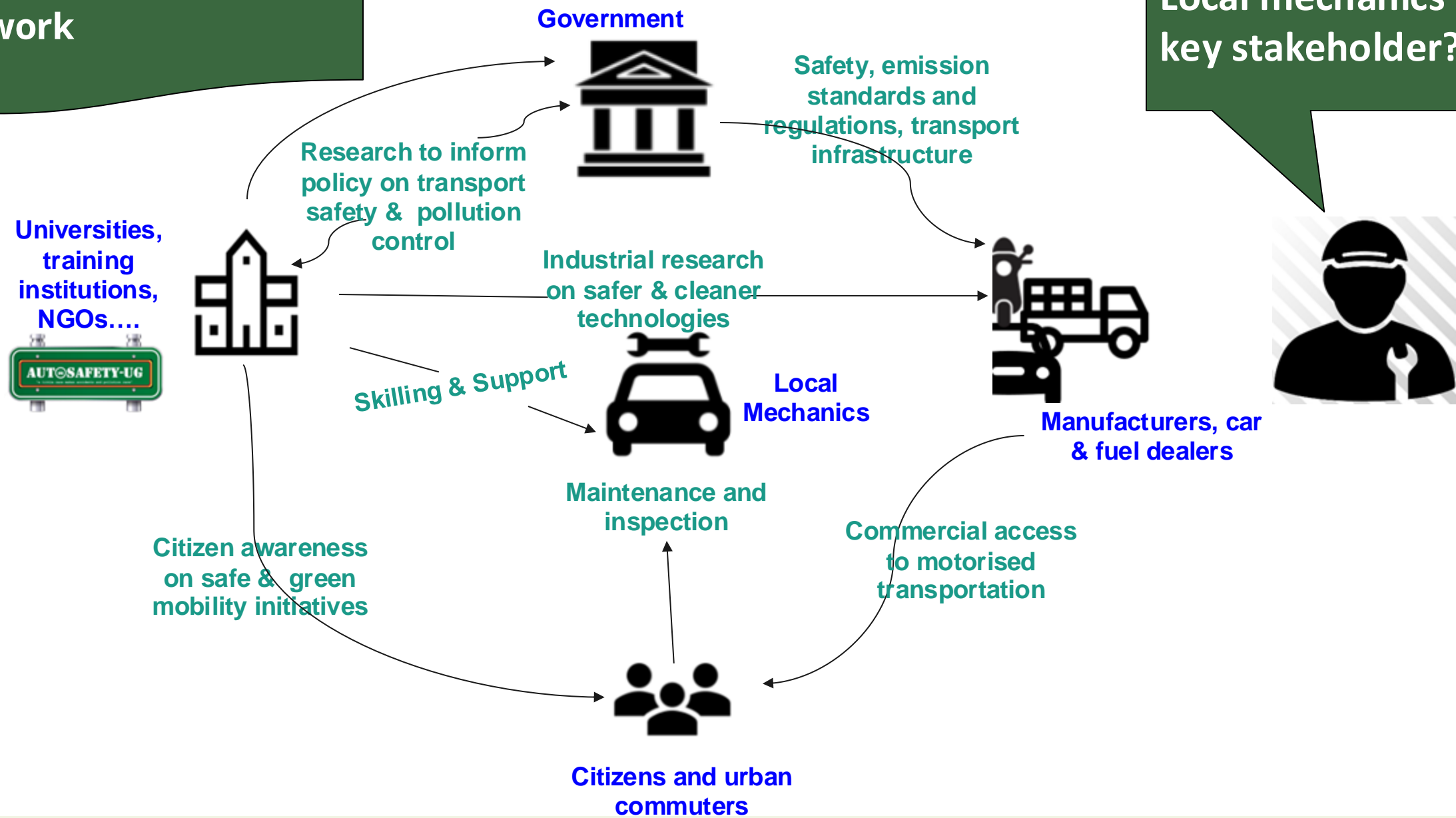
Vast majority of Garages/Repair shops in Uganda in makeshift format, no skills/tools yet tending to over 60% of Vehicles



2.3 million vehicles on Ugandan roads – MoWT/IRA.

Our Intervention framework

Local mechanics a key stakeholder??



Our community-driven approach.....



Stream I

**Raise Awareness,
Educate People**

Engaging communities and raising awareness about transport-induced air pollution. Public & child transportation services a key target audience.

Stream II

**Training Local
Technicians,**

Mobilising local mechanics for free, practical workshops, equipping them with knowledge, skills and basic tools for sustainable vehicle maintenance.
1500+ engaged so far, 5000 targeted.

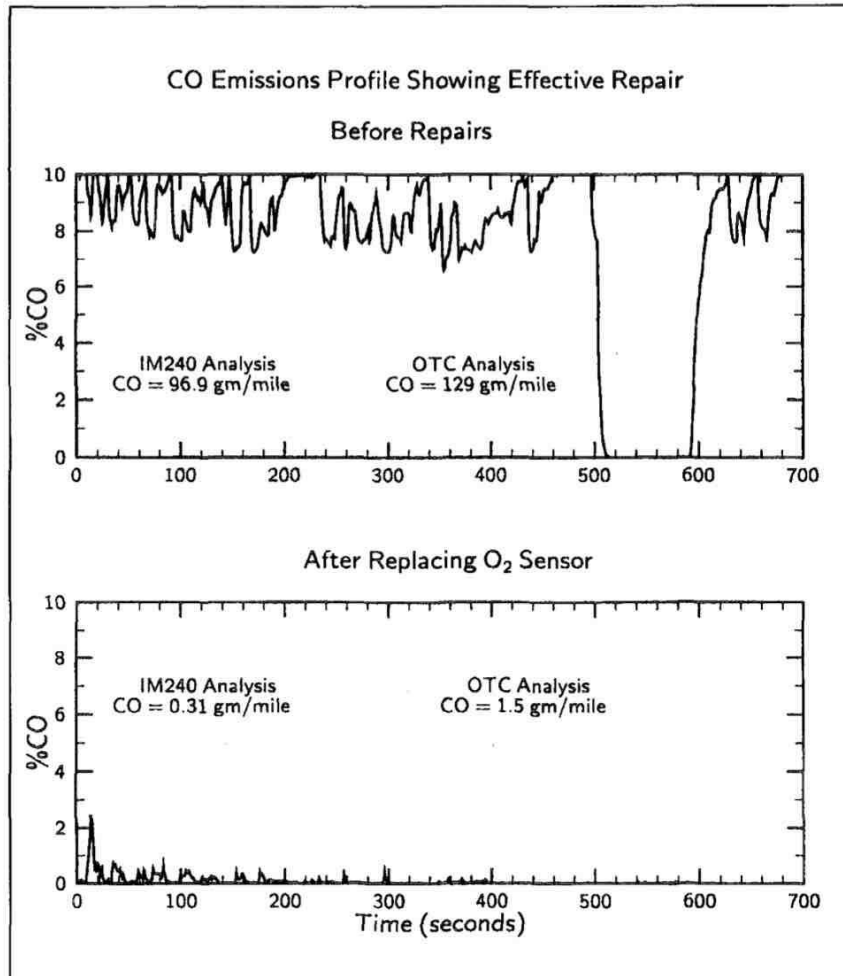
Stream III

**R&D + Policy
Influence**

Research to inform policy on road transport emissions, EV retrofit dev't on highest polluters and innovation in auto-related waste management.

[AirQo](#), MoWT, KCCA are key partners.

Our community-driven approach; why focus on mechanics??



Second-by-second %CO emissions traces before(a) and after(b) of a Mercedes 190E 2.6L - Credit: Paul L. Guenther and colleagues.

- ❑ Primary target groups are local mechanics, motorists and industrialists, and the aim is to enhance and maintain the integrity of emissions control systems capable of capturing the most harmful pollutants in the short-term while we seek to move away from fossil fuels in the medium term.
- ❑ The goal is to achieve better combustion, enhance tailpipe emission control, promote cleaner fuels and cut non-exhaust emissions from automobiles, repair garages and other related places.

...Pictorial updates from recent project activities



"a little care makes accidents, pollution rare"

....a little more details



DATA COLLECTION

We are collecting and analyzing local vehicular emissions to create a database for quantification. Data being used to inform policy and for trainings.



EV RETROFITTING

Working on EV conversion pilots for the common vehicles in the country especially public transport. Proof of concept already achieved now seeking resources for further developments.



WASTE MANAGEMENT

With multiple partnerships, planning 2 separate recycling projects for used oil and tires.



EXPECTATIONS

Improved Air Quality (and public health) in Africa, Accelerating Africa's Transport Decarbonization efforts and fostering large policy and regulatory reforms



CHALLENGES/NEEDS

Resource & visibility constraints, need for multi-sectoral partnerships, political barriers



[autosafety-uganda](https://www.linkedin.com/company/autosafety-uganda)

<https://autosafety-ug.org>



[@AutoSafetyUg](https://twitter.com/AutoSafetyUg)