



# Electric Mobility Standardization in Kenya

by

Robert Njoroge

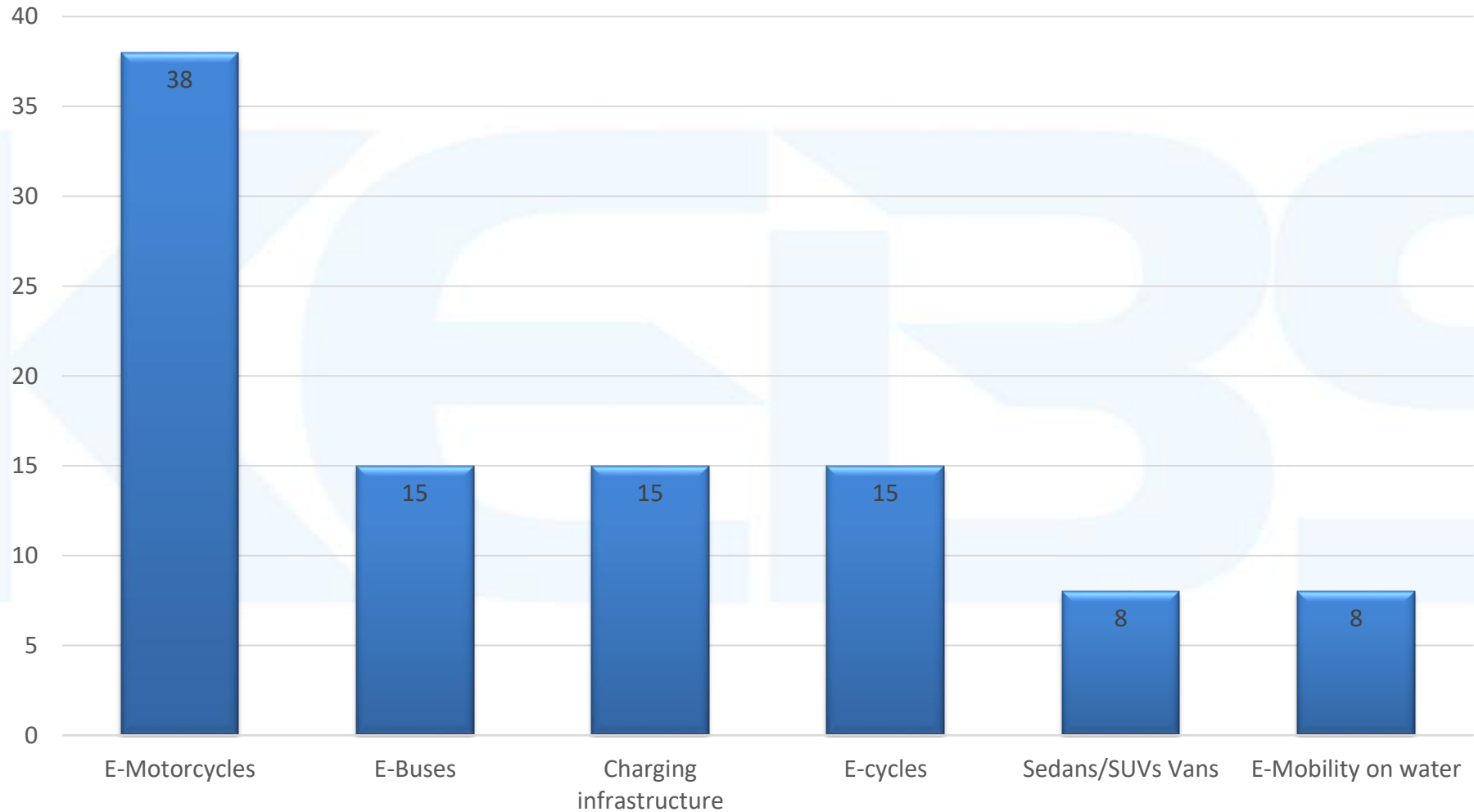
Senior Standards Officer

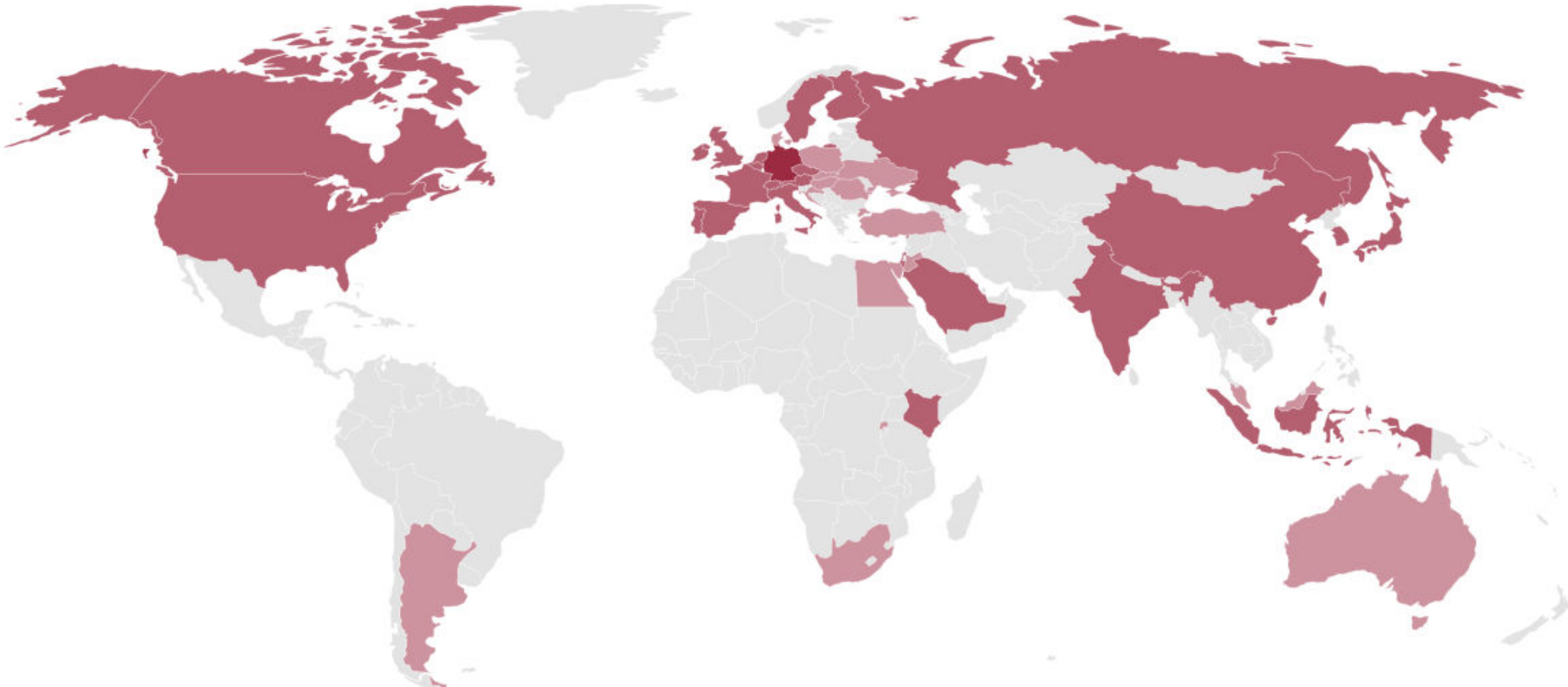
Kenya Bureau of Standards (KEBS)



KEBS TC 199 E-Mobility TC Manager

Transport & Climate Change Week- GIZ, Berlin, Germany  
11<sup>th</sup> September 2023

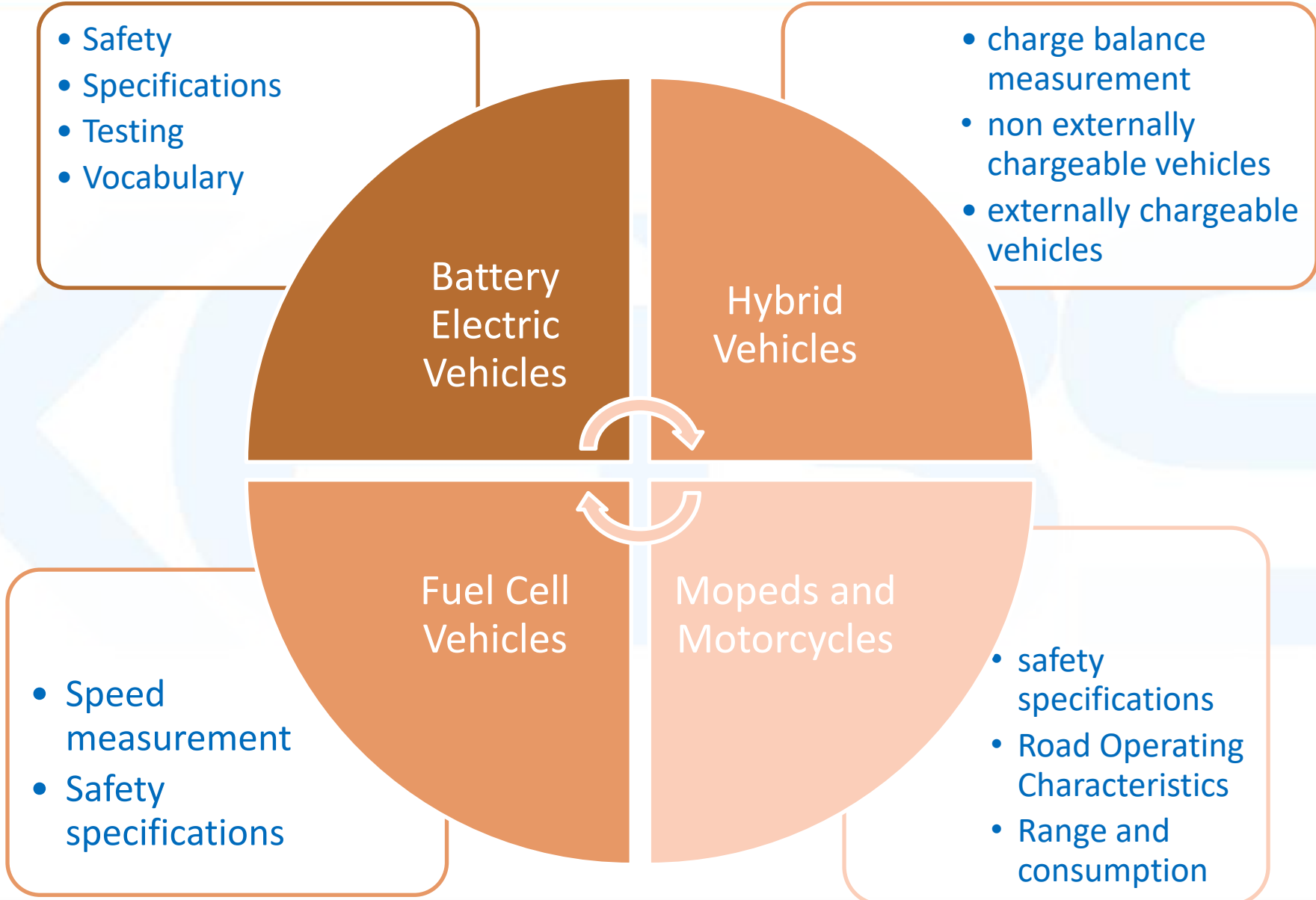
## E-MOBILITY SERVICE PROVIDERS IN KENYA





-  O- Membership
-  P- Membership

# KENYAN STANDARDS- E-Mobility



# Gaps in E-Mobility standardization



Charging cables for electric vehicles

Plugs, socket-outlets, vehicle connectors and vehicle inlets

Battery swapping

Safety requirements of connecting to an external electric power supply

Electric-tri/bicycles

Circuit breakers for battery powered vehicle applications

Electric vehicle wireless power transfer (WPT) systems

Electric vehicle conductive charging system

Vehicle to grid communication interface



# Standardization Challenges-Kenyan perspective



Kenya Bureau of Standards

Standards for quality life



## 1. Inspection of used EVs



## 2. Testing- Equipment, capacity building in institutions

## 3. Conversion from ICE to Electric- Roam Motors formerly Opibus Kenya



# Standardization Challenges-Kenyan perspective



Kenya Bureau of Standards

Standards for quality life

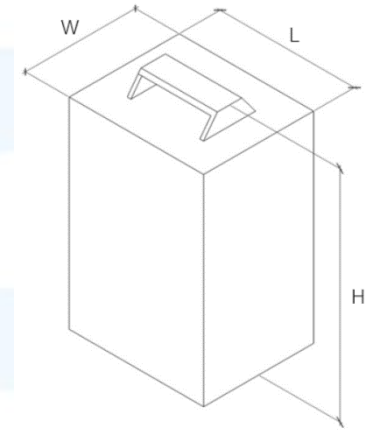


4. Battery Swapping Standardization-  
Image: KIRI EV Kenya



5. Battery Standardization- 2&3 wheelers  
Dimension, voltage range, weight

TISI 3316-2564 Electric Mopeds And Motorcycles – Removable Rechargeable Electrical Energy Storage System



6. Used EV- End of life-battery recycling (repurposing)

- **What Challenges are you facing in your country?**
- **How do your challenges relate to what we are experiencing in Kenya?**
- **What innovative elements are you incorporating to tackle standard related challenges?**





Thank you

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