Reskilling and Capacity Building
For
E-Mobility in Africa

Gad Senyuiedzorm Ashiagbor
Executive Director - AfricaNEV
Glossary

- AfricaNEV - Africa New Energy and Vehicles
- E-mobility - Electric Mobility
- EVTT - Electric Vehicle Technician Training
- EV - Electric Vehicle
- CSO - Civil Society Organizations
- SDG - Sustainable Development Goals
ABOUT

AfricaNEV is a forward-thinking organization dedicated to promoting and implementing e-mobility solutions across Africa. Our mission is to drive the transition towards cleaner, more sustainable transportation, and to support the development of a robust e-mobility infrastructure. We work with governments, businesses, and communities to create lasting change.
OUR TEAM

EXECUTIVE DIRECTOR
Gad Ashiagbor

DIRECTOR - ENVIRONMENT
Luttah Aluora

DIRECTOR - PARTNERSHIPS
John Msingo

DIRECTOR - COMMS
Byencit Duncan

DIRECTOR - E-MOBILITY
Olukokun Tolulope
### ROAD TRANSPORT IN AFRICA

#### ROAD TRANSPORT (FREIGHT & PASSENGER) - GHANA COMPARISON WITH OTHERS

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Passengers</th>
<th>Freight</th>
<th>% Share of Road Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>90%</td>
<td>95%</td>
<td>96%</td>
</tr>
<tr>
<td>Kenya</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>South Africa</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>Africa</td>
<td>82%</td>
<td>82%</td>
<td>82%</td>
</tr>
<tr>
<td>India</td>
<td>21%</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td>China</td>
<td>49%</td>
<td>49%</td>
<td>49%</td>
</tr>
<tr>
<td>USA</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>EU/UK</td>
<td>74%</td>
<td>74%</td>
<td>74%</td>
</tr>
</tbody>
</table>

- **Bikes**
- **Tricycles**
- **Cars**
- **SUVs**
- **Micro-mobility**
- **Passenger Vehicles**
- **Heavy Duty Vehicles**
- **Light Commercial Vehicles**
- **Vans**
- **Minibuses**
- **Buses**
- **Construction Eapts**
- **Mining Eapts**

14th May 2024
HOW INNOVATION SPREADS

Innovators 2.5%
Early Adopters 13.5%
Early Majority 34%
Late Majority 34%
Laggards 16%
BARRIERS TO E-MOBILITY ADOPTION

- Infrastructure
- Price
- After Sales Support
INSUFFICIENT KNOWLEDGE OR SKILLS:

1. By repair and maintenance technicians
2. By transport/Energy policymakers and regulators
3. By insufficient knowledge by the finance and insurance industry
4. By educational, developmental agencies, CSO etc
TRAINING FORMAT – Electric Vehicle Technician Training (EVTT)

1. Hands-on

2. Not more than 7 days per cohort

3. City based model with industry connection

4. Relevant, comprehensive and complete curriculum with quality delivery
EVTT - TRAINING TIMELINE

**2019**
- **EVTT1 Conceived**
- Initial Concept & Curriculum Developed

**2021**
- Interviewed Taurai Sewera
  - An african with the relevant skillset, knowledge and passion to assist with the teardown

**2023**
- **EVTT1 - Cohort 1 (Nairobi)**
  - Initial training successfully held in May

**2024**
- **EVTT2 Curriculum Developed**
  - 2EVTT2 - High and low voltage systems and split in two. EVTT2a - Assembly line workers. EVTT2m - Repair & Maintenance workers
- **EVTT1 - Cohort 2 (Nairobi)**
  - 2nd training successfully held in January
<table>
<thead>
<tr>
<th>WEEK 1</th>
<th>Virtual training</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAY 1</td>
<td>14th May 2024</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.00 am</td>
<td><strong>8.00 am</strong> Introduction to EV History: Past Present</td>
</tr>
<tr>
<td>9:30 am</td>
<td><strong>BREA K</strong> Electric &amp; Electronics Fundamentals.</td>
</tr>
<tr>
<td>10.00 am</td>
<td><strong>BREA K</strong> Introduction to Electric vehicle charging</td>
</tr>
<tr>
<td>11:30 am</td>
<td><strong>BREA K</strong></td>
</tr>
<tr>
<td>12.00 noon</td>
<td><strong>BREA K</strong></td>
</tr>
<tr>
<td>1:30 pm</td>
<td><strong>CLOSE</strong></td>
</tr>
</tbody>
</table>
# SCHEDULE FOR EVTT1

## WEEK 2

### Physical training

<table>
<thead>
<tr>
<th>Time</th>
<th>DAY 2</th>
<th>Time</th>
<th>DAY 3</th>
<th>Time</th>
<th>DAY 4</th>
<th>Time</th>
<th>DAY 5</th>
<th>Time</th>
<th>DAY 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.00 am</td>
<td>High voltage vehicles, safety and PPEs</td>
<td>10.00 am</td>
<td>Complete EV Teardown</td>
<td>10.30 am</td>
<td>High Voltage System Component Operations</td>
<td>1.00 pm</td>
<td>Tour of EV companies</td>
<td>2.00 pm</td>
<td>Electric Vehicle Diagnostic, Tune-up &amp; Maintenance</td>
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<td></td>
<td>K</td>
</tr>
<tr>
<td>10.00 am</td>
<td>Complete EV Teardown</td>
<td></td>
<td></td>
<td></td>
<td>Complete EV Teardown</td>
<td></td>
<td></td>
<td></td>
<td>Hybrid Electric Vehicle Diagnostic, Tune-up &amp; Maintenance</td>
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<tr>
<td>1.00 pm</td>
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<td>2.00 pm</td>
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<td>4.00 pm</td>
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14th May 2024
TRAINING OBJECTIVES & OUTCOMES

1. Complete understanding of the threats and opportunities of e-mobility
2. Hands-on practical insights into EV architecture & battery systems
3. A thorough understanding of EV issues, with the skills and effectively rectify problems
4. Knowledge of critical safety protocols, and routine maintenance for EVs
TRAINING OBJECTIVES & OUTCOMES

5. Skilling, reskilling and upskilling of technicians and youths

6. Increase Research and Development in EV Technology

7. Amplify the momentum of EV adoption throughout the continent

8. Contribute to achieving SDG 8 and 13
TRAININGS DONE SO FAR

Number of Trainees: 100
So far, over a 100 people have been trained in two cohorts

Industries Trainees: 10
Utilities, vehicle regulators, transport regulator, emobility, insurance, automotive, transport, consultancy, etc

Social Impact: 10X
We estimate that each trainee will have at least an impact on a minimum of 10 people
LOCAL PARTNERS NEEDED

We need local partners for all African countries Except: Kenya, Ghana, Nigeria, South Africa and Zambia

What A Local Partner Does: Handles operations and marketing for each training in a particular country.
WHAT NEXT?

- **2024**
  - EVTT1 All Female
    - GIZ Sponsored All-Female Training in June
  - EVTT1 - Cohort 1 (Lagos)
    - First Nigerian training to be held in July
  - EVTT1 - Cohort 3 (Nairobi)
    - Cohort 3 of the normal EVTT1 program immediately after the all-female training
- **2025**
  - EVTT2 Cohort 1 (City)
    - First cohort of EVTT2
  - EVTT1 - Cohort 1 (Accra)
    - First Ghanaian training to be held in July
OUR OTHER ACTIVITIES

THE SEAT WEBINAR
2nd quarter 2024 webinar

2024

Public transport Research

2024

THE SEAT SUMMIT
The maiden edition of the Sustainable Energy And Transport Summit for Africa

2025

Report -

2024

EVTT1 - Cohort 1 (Accra)
Other EVTT trainings for 3rd & 4th quarter

2024
Thank you!