











AGENDA AFRICA E-MOBILITY FORUM

20-24 March 2023

Hyatt Hotel, Dar Es Salaam, Tanzania

This is the first Africa E-mobility forum organized jointly by <u>SOLUTIONSplus</u>, the <u>Africa Support and Investment Platform for E-mobility</u> led by UNEP and <u>TUMI E-bus Mission</u>, which brings together delegates from **17 African countries** with financiers and at least **13 companies** working on the transition to electric mobility in the region.

20 March 2023 8am-5pm

Tanzania E-mobility Data and Policy by SOLUTIONSplus

<u>Target Groups:</u> E-mobility stakeholders in Tanzania and by invitation only

Time	Item	Speakers	
08:00-08:30	Arrival and Registration		
08:30-09:15	Opening remarks	Dar Rapid Transit Agency (DART) EU Delegation	
09:15-09:30	Introduction: Agenda; SOLUTIONSplus	Wuppertal Institute/UEMI	
09:30-10:30	Data collected for the e-mobility transition, Q&As	UEMI; Greenfoot; Knight Energy; WhereIsMyTransport	
10:30-11:00	Data panel: Further data needs and approaches for e-mobility	Moderation: DART Untapped; TRI; GIZ/CCTTFA	
11:00-11:30	Coffee break		
11:30-12:00	Policies: Presentation of AFEMA paper on electric mobility barriers in Tanzania	AFEMA	
12:00-12:30	Panel session on barriers	TAEMA; Ministry of Energy	
12:30-13:30	Lunch break		
13:30-15:00	Policies: Working session moderated by UN-Habitat Paper on e-mobility policy recommendations & introduction of the NUMP process	UN-Habitat	
15:00-15:30	Policies: Presentation of COSTECH work scope and timeline	COSTECH	
15:30-16:00	Coffee break		
16:00-16:30	Policies: Roadmap for Dar es Salaam	ITDP Africa	
16:30-16:45	Closing remarks	Wuppertal Institute/UEMI	













20 March 2023 1pm-5pm

Improving the Circularity of E-bus Batteries – Measures for procurers, operators and policy-makers by TUMI E-bus mission and Oeko-Institut

<u>Target groups:</u> Decision-makers around procurement and operation of e-buses; decision-makers around product standards and hazardous waste management

Time	Item	Speakers	
13:00-14:00	Lunch break		
14:00-14:15	Welcome & introduction	Moderator & GIZ-TUMI-expert	
14:15-14:30	E-buses and the concept of a circular economy - Why does it matter?	Oeko-Institut	
14:30-14:45	Questions & answers	Moderated exchange	
14:45-15:15	Measures to improve the circularity of e- buses and their batteries	Oeko-Institut	
15:15-15:30	Questions & answers	Moderated exchange	
15:30-15:45	Coffee break		
15:45-16:00	Extending the life-time of e-bus batteries through diagnostic data	Volytica (tbc)	
16:00-16:45	Moderated discussion	Moderated exchange	
16:45-17:00	Wrap-up & closure	Moderator & GIZ-TUMI-expert	













21 March 2023 8am-5pm

Meeting of the Africa Support and Investment Platform for E-mobility by UNEP

<u>Target groups:</u> Decision-makers from national and local government, companies and financiers interested in e-mobility

Time	Item	Speakers
08:00-08:30	Arrival and Registration	
08:30-09:30	Opening Remarks	Tanzania Minister of State, President's Office Regional Administration and Local Government; Dar Rapid Transit Agency (DART)
09:30-09:45	Introduction: Agenda and Africa Support and Investment Platform and Participants	UNEP
09:45-10:25	Project Presentations: Rwanda and Tanzania (SOLUTIONSplus), Cote D'Ivoire and Seychelles (GEF)	MININFRA, DART, SOTRA, SPTC
10:25-10:40	Q&As: open exchange on challenges and solutions regarding e-mobility projects in the region	UNEP
10:40-11:00	Coffee break	
11:00-11:30	Kenya, Uganda and South Africa (TUMI)	Nairobi, Kampala, Durban
11:30-11:45	Q&As: open exchange on challenges and solutions regarding e-mobility projects in the region	UNEP
11:45-12:15	Gender inclusion in e-mobility projects: learnings and principles from Kigali (SOLUTIONSplus), TUMI (gender-sensitive data & mobility)	Wuppertal Institute/UEMI; UN-Habitat; Ampersand; TUMI
12:15-12:30	Q&As	
12:30-13:30	Lunch break; possible walk to the E-mobility Innovators Fair	
13:30-14:30	Financing for e-mobility panel discussion followed by Q&A: Untapped Global, getInvest, KawiSafi Ventures, AFDB, AGF	Moderator: UN-Habitat Financiers
14:30-15:30	Panel with e-mobility innovators: TRI, Ampersand, Knights Energy, ELICO	Moderator: Africa E- mobility Alliance (AFEMA)
15:30-16:00	Brief closing remarks & coffee Joint walk to the E-mobility Innovators Fair	UNEP
16:00-18:00	E-mobility Innovators Fair	Azania Front Church













22-24 March 2023 (on invitation only)

Training on Electric Buses by UITP Academy

<u>Target groups:</u> Staff from public transport operators or authorities planning to introduce electric buses in their public transport system, policymakers and ministry staff involved in the uptake of electric buses and eager to learn more from international best practice.

Wednesday 22 March 2023

8.30 Welcome and introduction to the course

The training programme will begin with brief introduction of the training partners, the training agenda as well as the training participants. A round table will be conducted in order to better understand the learners, the state of their own e-bus projects and their expectations for this training course.

9.30 Session 1 - Introduction: An electric solution for urban bus networks

What is an electric bus and how can electric buses contribute to making public transport network competitive and our cities sustainable? What are the drivers and barriers when it comes to the choice of technology? How can it affect the institutional organisation and governance in a city?

10.30 Coffee break

11.00 Session 2 - E-bus technology and charging infrastructure & state of the electric bus market

This session will look into infrastructure and technologies used to run electric busses, whether it be the installation and operation of charging infrastructure, the impact on information technology systems, driver assistance and standardisation of the connection between e-bus and charging infrastructure.

12.30 Lunch

13.30 Case Study: Developing an electric bus operation and procuring electric buses

From line management and maintenance to training of personnel, driving and safety, the operations of a fully electric bus line differ substantially from that of a traditional bus line. The importance of studying the initial operational needs is key to successfully introducing electric buses, as much as the design and dimensioning of the line according to the energy supply and usage.

15.00 Coffee break

15.30 Session 3 - Getting the procurement process right

To successfully implement and run a fully electric bus line, it is essential to make the tendering process evolve from a simple vehicle purchase to the tendering of a comprehensive electric system, taking into account life cycle costs, charging infrastructure, batteries, business models such as leasing and renting, etc. Topics include:

• Tendering electric bus operations infrastruture and system













Financial approach

- Launching a request for quotation
- Deliverables for e-bus deployment
- Specifications
- Valuing tender criteria

16.30 Case Study: How to use data-decision making for the successful design and execution of your Electric Public Transport Strategy

How to structure a data-driven decision-making process? We will discuss assessing your cities/region position and direction. The of the use of external case studies from other regions and how to development a system framework.

How to collect data? Discuss the use of step 1 to design the pilot project / data collection. Practical data collection methods during (electric) public transport pilot projects, data analysis methods, looking at case studies from other regions.

How to make effective data-driven decisions? We will discuss practical examples of similar case studies and discuss the results of this methodology.

17.30 End of the day

Thursday 23 March 2023

8.30 Case Study: Successful Implementation of Battery Electric Buses in the (East) African Context

The (East) African context provides a launching pad for electric mobility, with a changing transportation landscape, high fuel prices, high renewable energy mix. The transition to electric public transport requires the whole system to adapt; including asset financiers, charging infrastructure, people (engineers, drivers and conductors) and policy makers.

10.00 Coffee break

10.15 Session 4 - Batteries for electric buses, Infrastructure & auxiliaries

This session will look into new auxiliaries and technologies used to run electric buses, whether it be the installation and running of charging infrastructure, the impact on information technology systems, driver assistance, standardization of the connection or the technical evolution of the battery.

- Driveline auxiliary components technology & maintenance infrastructure costs examples of best practice
- Batteries: technologies cell type behaviour management systems lifetime
 standards safety thermal management models

11.45 Case study: Electric BRT systems including CETUD in Senegal

12.45 Lunch











14.00 Session 5 - Electromobility

Financial mechanisms for financing

15.30 Coffee break

16.00 Case study: Electric Bus system in Nairobi

17.30 End of the day

Friday 24 March 2023

8.00 Study Visit DART

In this study visit we will explore the DART bus network and what would the e-BRT network look like via the visit of Bus stations and interchange as well as depot.

13.00 End of training programme