

Energy and Mobility

Terms of Reference (June 2022)

Working Group Leads: Sustainable Energy for All (SEforALL) and UK Foreign Commonwealth and Development Office (FCDO) – HVT Programme and CCG Programme

Context

SuM4All’s “Global Roadmap of Action toward Sustainable Mobility” (GRA) outlines more than 180 actions for countries and cities to consider in order to achieve sustainable mobility. This working group under the SuM4All umbrella, led by Sustainable Energy for All (SEforALL) and the UK’s Foreign, Commonwealth & Development Office (FCDO) High Volume Transport (HVT) Applied Research Programme and Climate Compatible Growth (CCG) Programme will implement action on access to **low emission** mobility specifically addressing the nexus between transport, energy and climate in the Global South.

The Energy and Mobility Working Group will consider the energy implications of the transition to low carbon and sustainable transport system. It will focus on the impact of a shift to new mobility solutions and business models¹ and electric vehicles (EV) on energy demand. It will consider alternative and transitional energy sources for transport such as electricity, biofuels (vegetable oil, biodiesel, bioethanol) alcohol (methanol, ethanol), and gaseous fuels (natural gas, liquid petroleum gas, and hydrogen).

Starting from the GRA’s catalogue of Policy Measures, the group will focus on how to **implement and measure the effectiveness** of policy measures to reduce greenhouse gas emissions (GHG) and promote low emission mobility. The group will draw on and utilize the Digital Toolkit for Energy and Mobility developed in 2020-21.

While the GRA has a strong focus on the transport sector, this working group will focus on the energy and transport nexus.

Complementarity with other Working Groups: Implementation of these policies may support other policy measures, such as those related to data sharing reviewed by the Enabling Data Sharing for Sustainable Urban Mobility working group. In order to avoid the duplication of efforts, the Energy and Mobility working group will not focus on the use of EVs; the E-mobility Working Group will address this issue and will coordinate with other working groups under the SuM4All consortium.

Objective

- Accelerate action in the energy and mobility field by applying its knowledge and toolkit to a Kenyan context (and then beyond).
- Share GRA policy measures focused on access to sustainable mobility.
- Improve infrastructure investments aimed at obtaining cleaner and more efficient public transport systems (including the use of fuel switching and renewable energy), through workshops, development of decision-making tools and partner coordination.

¹ [New mobility services](#) range from shared mobility such as car, bike and ride-sharing services to multimodal, door-to-door trip planning and mobility as a service. They complement city public transport services by providing mobility solutions for the first and last mile, reaching less dense or underserved areas and developing integrated ticketing or payment services, providing attractive and comprehensive mobility options also for those whose needs haven’t been fulfilled by traditional public transit services and thus channelling some new demand and customers for public transportation system.

Outcomes and Outputs

Through this working group, we aim to **accelerate action in the energy and mobility field through the following outcomes:**

- a. The knowledge in the Digital Toolkit is applied through a pilot project in Kenya, focusing on the cities of Mombasa and Kisumu
- b. GRA policy measures focused on access to sustainable mobility are shared, and the Digital Toolkit on Energy and Mobility is disseminated to relevant energy and transport sector stakeholders, including at COP 26.
- c. Working group workshops, decision-making tools, and partner coordination support improved infrastructure investments aimed at obtaining cleaner and more efficient public transport systems (including the use of fuel switching and renewable energy) and integrated multimodal transport networks.

Building on the work completed in the 2020-2021 workplan year, the Energy and Mobility Working Group will undertake the following activities and outputs for the 2022-2023 workplan year:

1. Dissemination of the Digital Toolkit developed by the working group in the 2020-2021 workplan (Q4 2021 – Q2 2022):

- (Digital Toolkit virtual Launch - (Q2 2021) – Key messages of Digital toolkit shared on social media with the support of SuM4All Secretariat)
- Organization and development of workshops and webinars with partners. These workshops will be targeted to policymakers, stakeholders and practitioners in the energy and mobility fields
- Participation of working group representatives at relevant conferences and global fora (e.g., COP27)

2. Piloting of Digital Toolkit (Q1 2022 – Q3 2022):

- Identification of priority country/urban areas where the Digital Toolkit can be further promoted and implemented, based on WG members' activities and existing relationships (preliminarily proposed pilot country: Kenya; proposed implementation of the digital toolkit in cities to promote the development of public transport infrastructures, new mobility solutions and non-motorized transportation)
- Apply the Digital toolkit and CCG tools¹² to develop integrated energy, transport, and GHG mitigation outlook
- Ensure appropriate representation of sector and subsector actions to report these in coherent cost-benefit terms across all decarbonization options
- Detail indirect benefits on the energy sector and national emissions
- Help to develop integrated governance suggestions in partnership with government and across development organizations to realize integrated benefits

¹ <https://www.open.edu/openlearncreate/course/index.php?categoryid=466>

² <https://climatecompatiblegrowth.com/summer-school-and-teaching-materials/>

- Implement monitoring and evaluation criteria for the effectiveness of pilot(s)

3. Upscaling and Replication Workshop (Q3 2022 – Q4 2022):

- Assemble lessons learnt from the Kenya pilot to (a) enable a revision of the Digital Toolkit, (b) assess its overall utility and effectiveness, and (c) support potential upscaling and replication to other Kenya cities and to other countries
- Support dissemination of lessons learnt and engagement with stakeholders and partners to consider financing solutions (such as climate finance vehicles to enable further implementation of the Digital Toolkit)

Impacts

The Energy and Mobility Working Group will support the integrated planning and delivery of energy and mobility for all by piloting the Energy and Mobility Digital Toolkit in Kenya and promoting opportunities for upscaling and replication. This will include special attention to aspects of gender, just transition, equity, and a green recovery from the COVID-19 pandemic. Metrics for evaluation will be part of the piloting work, which will be agreed upon during the workstream process.

Working Group Members

Sustainable Energy for All (SEforALL), High Volume Transport Applied Research, Climate Compatible Growth, International Road Federation (IRF), Institute for Transportation and Development Policy (ITDP), World Road Association – PIARC, Foreign Commonwealth and Development Office (FCDO), World Bank Group, International Civil Aviation Organization (ICAO), International Union of Railways (UIC), Islamic Development Bank (IsDB), UN Economic and Social Commission for Asia and the Pacific (UNESCAP), UN Department of Economic and Social Affairs (UNDESA), United Nations Economic Commission for Europe (UNECE), REN21, FIA Foundation, International Maritime Organization (IMO), World Business Council for Sustainable Development (WBCSD), ARUP, Victoria Transport Policy Institute (VTPI).