

Sustainable Electric Mobility: Building Blocks and Policy Recommendations

The transport sector's electrification has never been more prominent and relevant to the ongoing debate on the future of mobility. Given that the transport sector is responsible for more than one-quarter of energy-related greenhouse gas (GHG) emissions, governments worldwide need to take ambitious steps to limit global warming and achieve the Paris Agreement's Climate Agreement's goals. Transport accounts for a large proportion of local air pollutants contributing to seven million premature deaths annually worldwide.

The report "Sustainable Electric Mobility: Building Blocks and Policy Recommendations" focuses on policy enablers to e-powered mobility solutions. It is part of a comprehensive effort undertaken by the Sustainable Mobility for All (SuM4All) initiative to elaborate an actionable Global Roadmap of Action toward Sustainable Mobility (GRA). Led by the Transformative Urban Mobility Initiative (TUMI) and the International Association of Public Transport (UITP), under the umbrella of SuM4All, a group of experts developed this policy framework and actionable guidance to support sustainable electric mobility. The report is accessible on www.sum4all.org.

Why it matters to get e-mobility right

An analysis of practice worldwide shows that sustainable mobility is essential for achieving the Sustainable Development Goals. Electric mobility is a crucial component of a broader transformation of the transport sector towards this sustainable mobility— powered by low carbon, renewable electricity. However, as laid out in the report, e-mobility is more than the electric car. All transport modes must be considered for technical feasibility. In some circumstances, it is a powerful tool to shift travel and transportation to cheaper and more efficient modes and increase access to opportunities for many. Policies must be developed and implemented by countries to capture electric mobility's potential benefits while maximizing its contribution to sustainable development. The policy mix should combine electrification of the existing fleet with the grid's greening and promoting modal shift. Additionally, the approach must minimize unnecessary travel through integrated urban development and compact city planning.

Approach for Policy Deep-Dive on E-mobility

Starting from the GRA, this report analyzes the main barriers to electric mobility development, including two and three-wheelers; identifies seven essential building blocks for successful public policies in the field of electric mobility; and provides policy recommendations for three different categories of target audiences:

1. International development public policy community: bilateral and multilateral development organizations, international finance institutions, United Nations programs and agencies as well as international think tanks and non-government organizations (NGOs);

GRA in Action Series



These are actionable policy guidance developed from the Global Roadmap of Action Toward Sustainable Mobility (GRA) on cutting-edge topics related to transport decarbonization, including digitalization and data-sharing between public and private operators, energy and transport nexus, gender inclusivity, and the sustainability of the e-mobility model.

Sustainable Mobility for All (SuM4All) published the GRA in 2019, as the first-ever comprehensive policy framework to assist countries and cities improve the sustainability of their transport sector and achieve their Sustainable Development Goals. The GRA recognizes data collection, sharing and use as a critical thematic area for policy action to achieve our shared ambition toward sustainable mobility. By addressing glaring knowledge gaps in the sector and providing the tools for country engagement/decision-making, SuM4All is transforming the conversation on the future of mobility and raising the visibility of the transport sector as a solution to many global issues, including climate change, energy transition to low carbon transport and social stability.

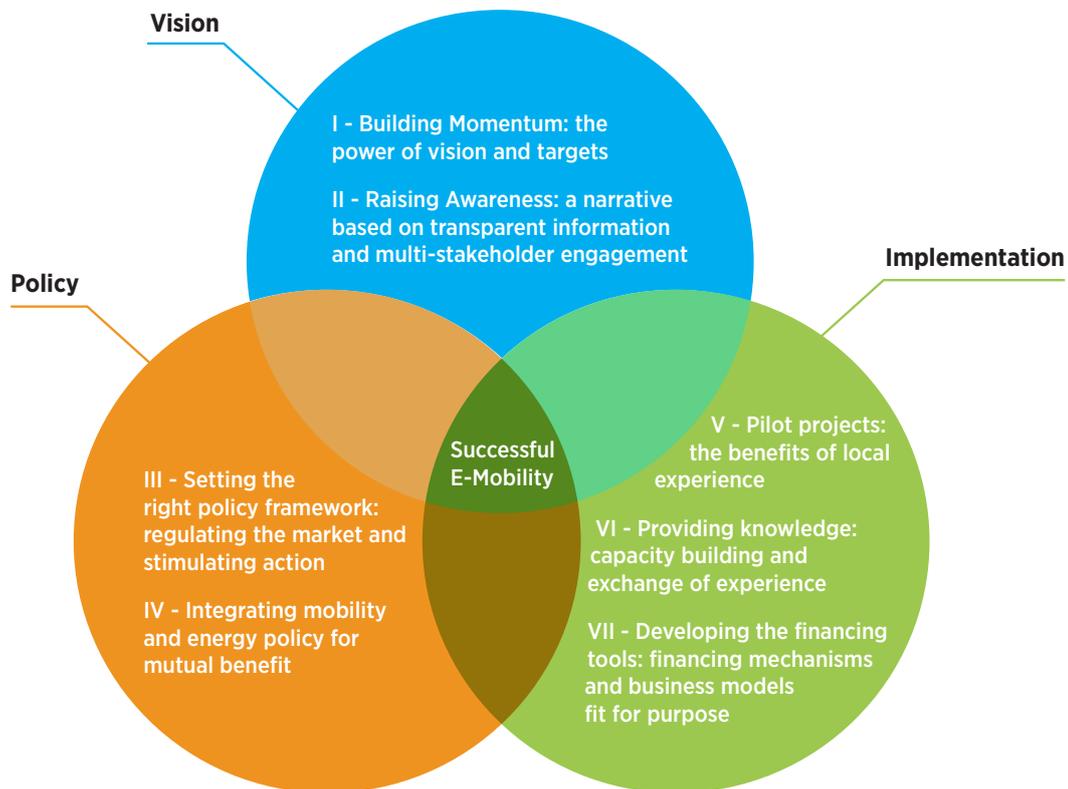
2. National public policy community: groups within a country such as national government ministries and agencies as well as think tanks and NGOs;

3. Local public policy community: city or regional authorities and agencies and think tanks and civil society organizations.

Considering that various e-mobility models' adequacy must be assessed given local circumstances, the report defines actionable public policy recommendations to accelerate the development of sustainable electric mobility.

Building Blocks for Sustainable Electric Mobility

Figure 1. Three action fields containing seven essential building blocks



An in-depth review of existing barriers shows a broad range of obstacles to the development of sustainable electric mobility. These range from policy and legislative barriers, lack of capacity and knowledge, market and financial barriers as well as technical challenges. Many of the identified barriers cannot be overcome by a singular actor or policy measure but require a coherent set of interventions by different actors and at different levels—international, national, and local.

Therefore, the paper defines seven essential building blocks of successful public policy for the development of sustainable electric mobility, ultimately leading to policy recommendations for the different levels of decision making. The various building blocks are mutually reinforcing and interconnected elements, which present the foundation of successful public policy. They are grouped into three key action fields—vision, policy, and implementation (figure 1).

While the priorities for the development of electric mobility depend on local circumstances and mobility needs, international, national, and local policy together need to provide a coherent and consistent locally appropriate public policy framework to catalyze sustainable electric mobility. The report makes recommendations for the multi-level dimension of governance.

In conclusion, we argue that supporting a sustainable electric mobility development will require clear and coherent policies in both the transport and energy sectors. This paper lays out a solid basis to inform decision makers about effective policy measures, which will catalyze their electric mobility efforts. If implemented well, electric mobility can support an accessible, efficient, safe, and green mobility for all.

You can [click here](#) to download the report. For more information or to get involved, please contact SuM4All sum4all@worldbankgroup.org.

