Partnering to Bolster Impact: the Sustainable Mobility for All (SuM4All) initiative experience

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Partnerships are critical to advancing sustainable mobility goals because they enable collaboration, leverage diverse expertise and resources, and drive collective action toward complex challenges that no single sector or organization can solve alone.

The **Sustainable Mobility for All (SuM4All)** initiative, hosted by the World Bank, is a global, multi-stakeholder partnership of over 60 international organizations that aims to steer the global mobility sector toward sustainable, inclusive, efficient, and safe transport systems. Members include multilateral development banks, United Nations agencies (including ICAO), bilateral donor organizations, non-governmental organizations, civil society, and academic institutions.

SuM4All is one of the few partnerships embracing all modes of transport, including aviation, public transport, rural, maritime, active mobility, rail, and road transport. While SuM4All's core work has historically focused on ground transport, its collaborative framework increasingly intersects with other modes of transport including aviation stakeholders as the push for comprehensive, sustainable mobility grows.

SuM4All provides a platform for coordinated advocacy where aviation stakeholders can participate in global dialogues on climate action in transport, advance global campaigns to reduce aviation emissions, and deliberate on shared frameworks and action agendas. Some examples of these collaborations include:

- SuM4All collaborates with aviation stakeholders, including ICAO (International Civil Aviation Organization) and IATA (International Air Transport Association)—to discuss policies that support the Sustainable Development Goals (SDGs). Activities include promoting low-carbon aviation policies, encouraging sustainable aviation fuel (SAF) adoption, and supporting decarbonization roadmaps aligned with the Paris Agreement temperature goals.
- SuM4All's Global Mobility Database and Global Tracking Framework facilitate data-driven decision-making by consolidating transport sector metrics, including from aviation. They work with aviation actors to improve emissions tracking, safety standards, and connectivity metrics, and include aviation in broader mobility assessments.
- SuM4All engages in cross-sectoral research initiatives, leveraging expertise from aviation organizations to explore sustainable transport technologies and innovation, study the integration of multimodal transport systems, including air travel in land-air logistics chains, and identify barriers to equitable access to air transport, especially for developing regions.

In summary, SuM4All's partnerships with aviation stakeholders adopt a systems-level approach to sustainability—reflecting aviation's contributions to environmental, social, and economic sustainability.

Paving the Way to Sustainable Aviation

SAF is widely recognized as the most critical lever in the aviation industry's path to net-zero carbon emissions by 2050, expected to deliver **up to 58 percent** of the total emissions reductions required according to the World Bank Report from 2022. These fuels can significantly lower lifecycle emissions compared to conventional jet fuel. Its compatibility with existing aircraft and infrastructure makes it a near-term solution with long-term impact, positioning SAF at the heart of aviation's decarbonization strategy. For these reasons, the World Bank is actively supporting efforts to scale up SAF development and deployment, making it a key priority on its sustainable transport agenda.

Enabling Greener Skies: The World Bank's Role in Advancing Sustainable Aviation

The World Bank is committed to developing a sustainable air transport sector in the Global South, and among its objectives, the multilateral institution aims to support the growth of the SAF industry and the implementation of airport and air navigation operational improvements in developing countries.

Regarding SAF production globally, countries outside the Organisation for Economic Co-operation and Development (OECD) remain significantly underrepresented in the SAF supply chain, often relegated to just exporting raw feedstocks while importing refined SAF. This difference is due mainly to the significant capital investment needed to expand SAF production. Projections by the World Bank indicate that scaling SAF globally will require annual greenfield investments of up to $124 billion, culminating in over 370 SAF–producing facilities by the late 2030s and early 2040s. The size of this investment underscores the opportunity for developing countries to move beyond raw material exportation to becoming integral players in SAF production.

In this sense, the Bank has acknowledged the opportunities and potential of the African continent within the SAF value chain, as the continent's aviation sector faces the dual challenge of reducing emissions amid rapid growth. Despite high costs, limited infrastructure, and fragmented policies, coordinated efforts and investments could enable Africa to become a key global player in sustainable aviation. Developing a local SAF industry would offer both environmental and economic benefits, including lower emissions, reduced reliance on imported fuel, job creation, and improved energy security.

The World Bank is partnering with national governments and private stakeholders to support a collaborative transition to SAF in Africa. A study is underway to assess SAF production costs and technologies in four high-potential countries: Kenya, Ethiopia, Nigeria, and South Africa. These countries offer strategic advantages due to their feedstock availability, infrastructure, and policy frameworks. Kenya focuses on used cooking oil (UCO) and castor; Ethiopia leverages sugarcane and municipal solid waste (MSW); South Africa has industrial capacity and Fischer Tropsch (FT) expertise; and Nigeria benefits from refining capacity and airport proximity. Together, they highlight Africa's strong potential in the SAF value chain.

Achieving scalable SAF production in Africa requires addressing two key cost drivers: risk premiums—due to higher capital and financing costs in African markets—and green premiums—the additional cost of choosing sustainable fuels over conventional jet fuel. Investment de-risking could significantly reduce SAF production costs, but a substantial green premium remains. For example, SAF still costs 47–69% more than jet fuel in countries like Kenya, Ethiopia, and South Africa. Support from multilateral development banks, through concessional loans, grants, and blended finance, is essential to bridge these gaps. With the right financial mechanisms, Africa—especially Kenya, Ethiopia, Nigeria, and South Africa—has strong potential to become a key player in the global SAF supply chain.

As noted above, the World Bank's support for sustainable aviation goes beyond SAF industry development; it also assists developing countries in reducing aviation-related GHG emissions through operational improvements in airport infrastructure and air navigation systems.

The World Bank is supporting climate-smart airport upgrades across regions. In Haiti, improvements to the taxiway system at Port-au-Prince Airport (PAP) are expected to cut GHG emissions by 1.25 million kg of CO_2

annually, thanks to reduced aircraft turnaround times and fuel consumption. In China, the Shangrao Sanqingshan Airport, built in 2018 with Bank support, showcases sustainable design with features like energy-efficient systems, stormwater reuse, and ground source heat pumps. It achieved EDGE certification, with 24% energy, 42% water, and 38% material savings, and enhanced regional connectivity. In Saint Lucia, the installation of a new Instrument Landing System (ILS) at Hewanorra Airport (UVF) will reduce flight delays and diversions in poor weather, while energy-efficient lighting and equipment will further cut emissions—supporting the Port of Spain Declaration goal of reducing CO_2 emissions by 40,000 tons per year through performance-based navigation (PBN). These initiatives highlight how targeted investments can improve operational efficiency, resilience, and environmental performance in the air transport sector.

Driving Change Through Cross-Sector Collaboration

Fostering **multistakeholder partnerships** that bridge aviation with other modes of transport is key to creating a **cohesive and sustainable global transport ecosystem**. To achieve this, strategies must focus on collaboration, integration, and shared goals that address environmental, economic, and social challenges.

To bridge aviation with other transport modes, stakeholders should enhance collaboration on **common sustainability targets**, such as net-zero emissions by 2050 and inclusive mobility while respecting the unique characteristics of each sector and the leadership roles of their respective organizations. Governments, aviation authorities, and transport sectors could work together in policy forums and regulatory frameworks to create a unified vision for sustainable mobility.

Creating **multimodal hubs**—integrated transport terminals that combine air, rail, and road networks—enhances connectivity and reduces inefficiencies. By investing in smart infrastructure and digital solutions, stakeholders can enable seamless transitions between transport modes. Technological innovations like Mobility-as-a-Service (MaaS) platforms, electric aviation (eVTOLs), and SAF are key to reducing carbon footprints across all transport sectors and ensuring a more interconnected, sustainable transport ecosystem.

Successful integration of aviation with other transport modes requires broad **stakeholder engagement**, including **governments**, **private sector actors**, and **civil society**. This is where SuM4All plays an integral part by involving all relevant parties across all transport sectors to help create a cohesive environment and facilitate smoother integration between air, rail, and road systems.