

The Green Urban Mobility Partnership Newsletter

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Developments in GUMP Project Portfolio

Bridging the Gender Gap

Transitioning towards clean Public Transport Systems

Improving Accessibility in Indian Cities

Changes in Leadership

- E-Mobility project supports Ministry of Heavy Industries (MHI) in building awareness on fire safety for electric buses in India

- Demystifying Gross Cost Contract (GCC) Management for E-Buses in India

- FAME II – and what is next?

- Leveraging Carbon Finance for Sustainable Transport Initiatives

- Energy Efficiency & Mobility – an important nexus

- Urban Mobility Innovation

- Developing Cycling Infrastructure in Urban India

- Accessibility Audits of facilities for Persons with Disabilities

- Little Woods by Nagpur Metro – a success story in protecting eco-systems and adapting to climate change in mobility projects

Developments in GUMP Project Portfolio

Bridging the Gender Gap

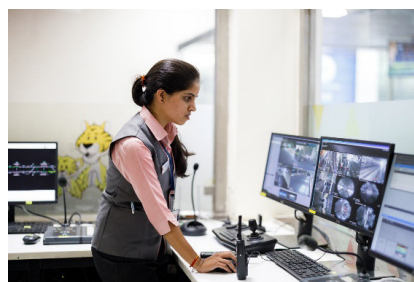
Ensuring safe and gender-responsive public transportation systems is vital for promoting gender equality in India. Women's access to education, employment, and healthcare relies heavily on dependable transportation. Unfortunately, concerns related to harassment and inadequate services make women vulnerable during travel, limiting their mobility and opportunities. Factors like poorly lit streets and overcrowded buses worsen these issues, contributing to a significant gender gap in public transport usage and service provision.

Globally, the United Nations' 2030 Agenda for Sustainable Development includes Goals 5 and 11 that promotes gender equality and inclusive, sustainable cities. Several nations have embraced foreign development policies based on gender equality principles, aiming to promote these objectives and deconstruct discriminatory frameworks. The German Federal Ministry for Economic Cooperation and Development (BMZ) promotes feminist development policy through:

1. Implementing feminist development approaches and increasing funding for gender equality projects.
2. Collaborating with partner countries to adapt programs to local gender equality needs.
3. Encouraging internal



Source: IDR Feb 16, 2021 issue



Female Station Manager at Sitabuldi Interchange Metro Station
Source: KfW / Jonas Wresch



Nari Shakti Coach of Nagpur Metro
Source: KfW / Jonas Wresch



Female Ticketing and Control Staff at High Court Water Metro Terminal
Source: KfW / Anja Fourie

changes in executing organizations like GIZ and KfW Development Bank to advance gender equality.

In response, the Directorate of Urban Land Transport (DULT) in Bengaluru established Gelati - Gender Lab for Transit

Interventions - focusing on identifying gender-specific urban mobility challenges and addressing the infrastructure gap, with a particular emphasis on women's needs. Additionally, knowledge-sharing workshops organized under the

Sustainable Urban Mobility- Air Quality, Climate Action, and Accessibility (SUM-ACA) project by GIZ, in collaboration with the World Bank and supported by DULT, are instrumental in disseminating learning and driving reform implementation. These workshops help identify the structures, roles, and activities that Gelati can undertake with SUM-ACA's support, fostering significant progress toward more inclusive and gender-responsive urban transportation systems.

KfW, a key player in gender mainstreaming within urban transport projects, ensures that gender aspects are integrated throughout all project phases. Project-specific Gender Action Plans (GAPs) ensure the consideration and implementation of women's and transgender persons' mobility needs. For example, the Nagpur Metro, co-financed by KfW, reserves a coach for lady passengers and children, provides child care rooms, and employs closed-circuit television

(CCTV) surveillance and quick reaction teams for passenger safety. Another example: the Kochi Water Metro actively employs women in various roles at ferry stations and plans to train eligible women as ferry drivers, demonstrating a commitment to gender diversity in the workforce. KfW continues to prioritize gender aspects in Green Urban Mobility projects under its development cooperation, working toward a more inclusive and equitable transportation landscape

Transitioning towards clean public transport systems

E-Mobility project supports Ministry of Heavy Industries (MHI) in building awareness on fire safety for electric buses in India

In India, the Glasgow COP26 agreement's influence is evident as decision makers commit to a cleaner transportation future, focusing on EVs, especially in mass transit buses. However, safety concerns have emerged due to fire incidents involving various EV types in last few years. These incidents, attributed to quality issues, underscore the critical challenge of ensuring

the safety of electric buses in their widespread adoption.

In collaboration with Ministry of Heavy Industries (MHI), Convergence Energy Service Limited (CESL), and the Association of State Road Transport Undertakings (ASRTU), GIZ developed training materials covering electrical safety training, electric bus architecture, fire suppression tactics, and high

voltage safety and disabling procedures.

Training sessions for government officials and frontline responders from public transport agencies enhanced capacities, reaching 160 officials across three levels was held in March and June 2023, with upcoming batches in November 2023 and January 2024.



Group photograph Source: E-Mobility Project, GIZ India

Demystifying Gross Cost Contract (GCC) Management for E-Buses in India

EVs play a pivotal role in India's climate change mitigation efforts, aligning with global commitments such as the Paris Agreement. To promote EV adoption and address these emissions, India has introduced initiatives like the FAME scheme and mandated the Gross Cost Contract (GCC) model for electric bus procurement. Central Electronics Limited (CESL) recently procured over 12,000 electric buses at reduced rates through the Grand Challenge and National E-Bus Programme. These buses will be operated by State/City Transport Undertakings (STUs) under a standardized Model Concession Agreement (MCA) established by Niti Aayog. However, as GCC is a relatively new concept for most STUs, there's an urgent need to enhance their contract management capabilities to



Source: E-Mobility Project, GIZ India

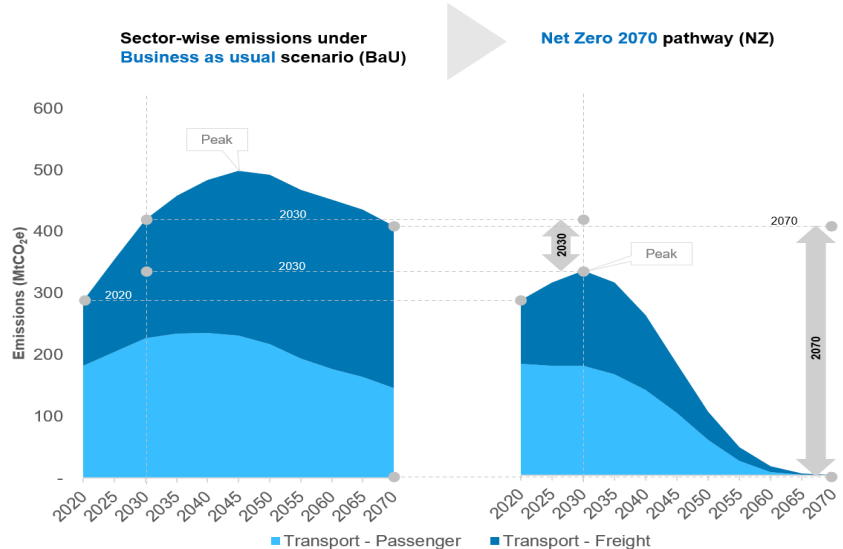
effectively navigate these complex arrangements. In June 2023, the German Development Agency (GIZ), MHI, and CESL joined together to begin a capacity-building effort in answer to this demand. This training, attended by about 40 officials from nine states who are STU representatives, aims

to better prepare the staff of public transportation agencies to handle GCC. The training covers various aspects, including procurement, the Model Concession Agreement (MCA), operations, performance evaluation, service quality improvement, ITS, payment mechanisms, and contract legality.

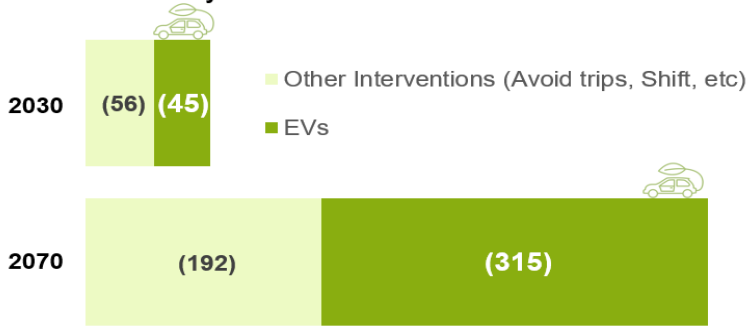
FAME II – and what is next?

The Government of India (GoI) is actively implementing policies and incentives to boost the EV industry. However, market uncertainties like manufacturing investments, emissions, financing, and consumer adoption require simultaneous targets for scalability. Private sector involvement, especially in charging infrastructure and resource management, can play a pivotal role in achieving sustainability while considering the perspectives of various stakeholders in the electric

India's Net Zero commitment Prominent role of electric vehicles



Potential Emission avoided (in MtCO₂e) as a result of Net Zero Pathway and share of EVs



EVs projected to avoided **45 MtCO₂e** by 2030 i.e. **41%** of overall reduction

EVs projected to avoided **315 MtCO₂e** by 2070 i.e. **62%** of overall reduction

Electric vehicles offer the largest avoided in emissions and should be the primary focus area for the government to ensure that transport sector is decarbonized by 2070

Source: Market assessment and stakeholder consultation to evaluate the electric mobility transition in India, Deloitte

giz

mobility and urban transport sectors.

GIZ is actively involved in shaping the comprehensive FAME III policy to bolster India's EV ecosystem. This includes:

- Reviewing government emissions commitments and identifying key stakeholders driving EV development.
- Understanding stakeholders' goals and interests.
- Assessing market readiness for EV adoption and identifying employment opportunities.
- Identifying areas for expanding EV use (e.g., institutional, school, airport, waste disposal, corporate fleets).
- Creating an "as-a-service" framework for

transitioning to service-oriented transportation.

- Developing "mobility/energy/battery-as-a-service" models to promote EV adoption.
- Creating an action plan that includes:
 - Identifying priority areas for implementation based on feasibility within the existing EV ecosystem and establishing implementation timelines.
 - Identifying national and state-level agencies responsible for facilitating rapid EV adoption and transition.
 - Recommending strategies for long-term gender inclusion in the EV ecosystem, along with financial plans for priority area interventions.

Leveraging Carbon Finance for Sustainable Transport Initiatives

India's National Determined Contributions (NDC) target and striving for net-zero emissions by 2070, as outlined in the 'Panchamrit' strategy at COP 26, critically depends on decarbonizing this sector.

India is taking significant steps towards a cleaner transportation sector. Initiatives like FAME I and FAME II have already led to the operation of over 4,000 electric buses, with 10,000 more on the way. Now, Convergence Energy Services Ltd (CESL) is pushing forward with a ground-breaking \$10-billion tender for 50,000 electric buses under the National E-Bus Programme, further boosting decarbonization efforts.

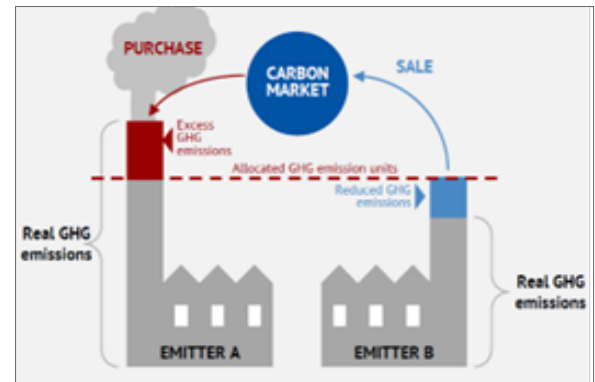
However, financial challenges, especially for Public Transport Authorities (PTAs), remain a significant hurdle. To expedite these crucial investments, tapping into international voluntary carbon markets is essential. These markets offer rapid green financing for e-bus electrification, but the intricacies of project approval often necessitate capacity-building for project proponents.

India's carbon market is forecasted to reach nearly USD 10 billion by 2030, offering cost-effective opportunities for emissions reduction. Carbon credits



Source: www.mygov.in

CESL to develop bankable carbon finance projects for electric buses and access international voluntary carbon markets. This includes registering a grouped project initially for identified cities, with plans to expand to other cities. The project also focuses on building the capacity of key stakeholders



Source: www.carboncredits.com

can help offset initial costs, providing vital support to budget-constrained PTAs and operators. This approach establishes a “payment security fund” to ensure timely e-bus operator payments and

generate additional revenues. Under the Indo-German Technical Cooperation (TC) project, GIZ is collaborating with the Ministry of Heavy Industries (MoHI) and

in the public electric bus ecosystem, empowering them to efficiently understand, develop projects, and access carbon financing from these markets.

Energy Efficiency & Mobility – an important nexus

KfW Development Bank introduced climate mainstreaming as a core component of project design and appraisal in 2020. The aim is to increase the impact of KfW-financed projects, ensuring greenhouse gas savings and resilience to climate change effects.

There are three main components that determine a positive climate impact of mobility projects: modal shift, green energy, and energy



Nagpur Metro: An energy efficient public transport system,

Source: KfW / Jonas Wresch

efficiency. Amongst these components, energy efficiency is a key focus of mobility projects under the Green Urban Mobility Partnership as part of Indo-German Cooperation. Energy efficiency aims at a more efficient use of energy resources, which leads to an overall reduced demand for energy and thus also to a reduced dependence on fossil fuels.

Both traction-related and non-traction-related measures can be taken to increase energy efficiency. To reduce traction energy, there is the option of energy recovery on trains and buses or the introduction of more efficient bus schedules and driving patterns. Non-traction related energy efficiency measures involve those that do not affect the vehicles themselves. These include, for example, measures at stations such as the use of LED lamps, the choice of location and orientation of a station taking into account geographical conditions, building materials and technology and the use of reflective colours for the



*Ferry charging at Kochi Water Metro Terminal,
Source: Kochi Metro Rail Limited (KMRL)/Sajan John*

facade to support a cool indoor climate.

Different accreditations have evolved over the last few years that certify appropriate levels of minimized negative climate impact. One of them is the Indian Green Building Council (IGBC) Certification, which provides certification and energy efficiency ratings to the system components, more specifically, for example, stations. The KfW-financed Nagpur Metro Rail system has already attained platinum rating for its metro stations.

The Kochi Water Metro project

operates energy-efficient ferries which have transitioned from diesel to hybrid-battery-operated electric ferries. The lithium-titanium-oxide (LTO) batteries were chosen over other technologies owing to its capabilities to store energy and utilise the same for operations upto a speed of 8 knots. The battery requires no active measures for water cooling or fire suppression. Propagation of thermal runaway between the battery cells is minimal. LTO batteries are completely air-cooled, which is an easy, safe, and robust system.

Honourable Prime Minister Mr. Narendra Modi inaugurates Kochi Water Metro, operations begin:

On April 25, 2023, Honourable Prime Minister inaugurated the Kochi Water Metro, supported by EUR 85 million in concessional funds from Germany's KfW Development Bank. This innovative system includes 78 hybrid electric boats, connecting 38 terminals on 10 islands over 76 kilometres. In the first phase, it is set to facilitate 80,000 daily trips, benefiting 34,000 passengers with 30% time savings compared to



*Honourable Prime Minister Mr. Narendra Modi at the inauguration of Kochi Water Metro on April 25th 2023
Source: Kochi Metro Rail Limited*



Ferries of the Kochi Water Metro leaving a Water Metro Terminal
 Source: Kochi Metro Rail Limited

roads. The Water Metro integrates seamlessly with Kochi's metro and bus networks, with accessible terminals and safety measures for women. It is envisaged to be the world's largest electric boat fleet for public transport and gained global attention, including from the World Economic Forum (WEF).

Dr. Philipp Ackermann, German Ambassador to India experiences Water Metro in Kochi



Source: Kochi Metro Rail Limited



Ambassador Ackermann visits Kochi Water Metro with Managing Director Mr Loknath Behera
 Source: Kochi Metro Rail Limited

In June 2023, German Ambassador to India, Dr. Philipp Ackermann, visited the Kochi Water Metro. He explored this innovative water-based public urban transport

system, showcasing the fruitful Indo-German collaboration, supported by Germany and KfW under the Green Urban Mobility Partnership. Mr. Loknath Behera, Managing

Director of Kochi Metro Rail Limited (KMRL), and Mr. Wolf Muth, KfW India Country Director, joined the Ambassador on this visit.

Urban Mobility Innovation

With the global population steadily increasing and urbanization, trade and logistics on the rise, there is an opportunity to address mobility challenges using emerging technologies and enhance urban space and infrastructure to build inclusive cities which

celebrate diversities. By embracing smart mobility solutions and best practices from across the world, cities can significantly improve the quality of life for citizens. The Urban Mobility Berlin India (UMBI) project aims to connect German and Indian actors in



Jury Panel Source: Living Lab, GIZ India

addressing the challenges of climate-friendly urban mobility in India. Bringing together innovative companies, public institutions, and private actors in close cooperation, the project links the key players in the urban mobility sector – both in the innovation hubs of Berlin and the fast-growing markets of India.

The UMBI project was established in 2022 by the **Senatsverwaltung für Wirtschaft, Energie und Betriebe** in cooperation with the **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH**, supported by the **Federal Ministry for Economic Cooperation and Development (BMZ)** through

program “**Promoting India’s Transformation to Sustainable and Climate-Friendly E-Mobility**”, commissioned by BMZ and implemented by GIZ and the develoPPP programme “**Green Urban Mobility Innovation Living Lab**” partnered with Bosch India, is proud to have associated with **enpact** for the Urban Mobility Berlin India (UMBI) project.

Three key challenges in sustainable urban mobility space were identified in collaboration with our government partner **Directorate of Urban Land Transport (DULT)** and program partner **entoo**.

1. Creating Gender-inclusive systems: Designing

Bangalore

3. Decarbonise transport with hydrogen: Researching development of hydrogen-powered vehicles to decarbonise transport in India

Ten shortlisted teams were invited to participate in an Innovation Sprint held by NSRCEL, Indian Institute of Management Bangalore (IIM-B) in Bengaluru, India, from May 8th to May 12th, 2023. Mr. Achim Burkart, Consul General of the German Consulate General in Bengaluru, inaugurated the event, emphasising the importance of disruptive mobility innovation in addressing climate challenges. Following presentations by challenge owners, the



UMBI group photo Source: Living Lab, GIZ India

the **Bund-Länder-Programm**, and is implemented by **enpact e.V.** as an integral part of the start-up platform **AsiaBerlin**.

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH’s bilateral

solutions to make public transport safer, convenient and more inclusive

2. Handling freight with finesse: Obtaining data on cargo and urban freight vehicle movement within

Directorate of Urban Land Transport, and Entoo, discussions among founders, public and private sector stakeholders inspired different perspectives and insights.

After reviewing the presentations and witnessing

the teams' dedication throughout the arduous selection process, the intense evaluation and scrutiny applied to each solution showcasing the depth of talent and ingenuity among the participants, the winners of the

competition were revealed.

- Best Business Idea: **Pivotchain Solutions**- offering AI driven real time video surveillance and analytics platform.
- Highest Impact: **Safetipin**- using tech and data to make

public spaces safer and more inclusive for women.

- Best Presentation: **Pixuate (Cocoslabs Innovative Solutions Private Limited)**- offering face, license plate, and thermal analytics for security and surveillance.

Improving Accessibility in Indian Cities

Developing Cycling Infrastructure in Urban India

During COP 26, India pledged to achieve Net Zero emissions by 2070 by reducing the 13% of CO2 emissions from transport sector. However, cycling in India faces challenges like poor roads, harassment from motorists, and bike theft due to a lack of secure parking. A 2019 TERI study estimated that if bicycles replaced cars and motorcycles for short trips, it could yield an annual benefit of Rs. 1.8 trillion. To promote cycling, GIZ India and the Directorate of Urban Land Transport, Government of Karnataka, organized a 5-day training



Mr. Achim Burkart, Consul General for Federal Republic of Germany participated in the cycle ride.

Source: SUM-ACA and Living Lab, GIZ India

program on 'Cycling Infrastructure for Urban Environments' with the Dutch Cycling Embassy in February 2023. The program included classroom sessions, site visits, and discussions on cycling infrastructure design, combining bikes

INDIA'S BICYCLE MARKET IS ON A FAST TRACK

- India's cycle industry is the **2nd largest** in the world
- India is the **3rd largest consumer** of bicycles
- **15 to 22 million** units manufactured every year
- Turnover of **₹ 5,000-7,000 crore**
- Set to grow at a **CAGR* of 8.6%** between 2017-2030
- Cost of one bicycle varies from **₹ 6,000 to ₹ 600,000**
- Cycling for short distancing can earn an annual benefit of **₹ 1.8 trillion** to the Indian economy, according to the Ministry of Housing and Urban Affairs

Source: Niti Aayog, All India Cycles Manufacturers Association, Goldstein Market Intelligence



Group Photograph Source: SUM-ACA and Living Lab, GIZ India

with public transport, traffic education, and encouraging bicycle use. Participants visited key locations in Mysore, assessed existing cycling infrastructure, and proposed improvements. They also developed

preliminary plans for cycling infrastructure in their areas. The step was very well accepted by the participants. More such training programmes will be carried out in SUM-ACA project partner states.



Panel discussion
Source: SUM-ACA and Living Lab, GIZ India

Accessibility Audits of facilities for Persons with Disabilities

Individuals with disabilities have equal rights to engage in societal activities, but often face barriers. Disability inclusion aims to ensure their access to services. As per Census 2011, PWDs (persons with disability) in different states varies from 4-20% of the total population. The 'Accessible India Campaign' promotes accessibility for all. The campaign aims at

providing equal opportunity to persons with disabilities to participate in all aspects of life and live independently by developing accessible physical environment, transportation system and Information & communication ecosystem.

In line with initiative, Green Urban Mobility Innovation Living Lab (GUMILL) audits accessibility in Malleswaram Test-bed area, partnering with

RampMyCity (RMC) to address physical and communication barriers. The audit covers streets, buildings, schools, and public transport. GUMILL plans workshops, site visits, and recommendations to improve accessibility. The goal is to enhance citizens' quality of life and showcase solutions for wider adoption by the city government.



Source: Living Lab, GIZ India

Little Woods by Nagpur Metro - a success story in protecting eco-systems and adapting to climate change in mobility projects

Protecting vital natural resources while undertaking large-scale infrastructure projects is a matter of national and global importance. Therefore, Germany supports India's efforts to decarbonize public transport and also collaborates in establishing best practices for protecting the environment and biodiversity. Green Urban Mobility projects focus on making people's lives easier, helping to reduce greenhouse gas emissions, and improving air quality. On the other hand, construction can lead to ecological disruption, and the felling or trimming of trees is sometimes unavoidable.

On behalf of the German Cooperation, KfW Development Bank supports partners to undertake

environment friendly initiatives. In the Nagpur Metro Rail Project, co-financed by KfW and implemented by Maharashtra Metro Rail Corporation Limited (Maha Metro), Little Wood and Little Wood Extension represent state-of-the-art initiatives addressing essential biodiversity issues in urban areas. For every tree that was cut down to build the metro, 15 new trees were planted in its place. In total, 11,500 trees, including medicinal, ornamental, fruit-bearing, and flowering plants, along with 3,800 new bamboo species, have been planted. The initiative developed and maintained by Maha Metro next to the Ambazari Lake precinct is appreciated by locals, especially the elderly.



Source: KfW / Jonas Wresch

Little Wood is a wonderful place to relax, enjoy fresh air, exercise, and is frequented by visitors and the general public throughout the day for various activities. Little Wood covers an area of 23 hectares and is within walking distance of Vasudev Nagar Metro Station. Since its establishment, a significant increase in biodiversity in the forest has been observed.



Local residents enjoying morning time at the Little Woods,
Source: KfW / Jonas Wresch

Changes in Leadership:



Christian Kapfensteiner

Director and Cluster Coordinator, *Sustainable Urban and Industrial Development*, GIZ

With a degree in International Relations and Diplomacy and in Sustainable Development, Christian's professional experience lies in urban governance, decentralisation

and public service delivery. Before coming to India in mid-2023, Christian worked in GIZ-supported urban projects in Mozambique and Cambodia.



Daniel Ernesto Moser

India Director Transport, GIZ

Daniel Ernesto Moser joins as Director Transport for the SUID portfolio of GIZ India. His expertise spans critical areas such as the worldwide

expansion of electric mobility, transport decarbonization, and the future landscape of urban infrastructures and public transportation.



Manjunath Chande Sekhar

Head, Sustainable Urban Mobility, GIZ

Manjunath Shekhar has joined as Head, Sustainable Urban Mobility, GIZ India. His expertise lies in Public-Private-Partnerships, where he has collaborated with various Governments, multilateral, and bilateral agencies to advance their

development objectives. In addition, he spearheads the develoPPP endeavor, the Green Urban Mobility Innovation Living Lab, a collaborative initiative between GIZ and Bosch India, headquartered in Bengaluru, India.

SUM-ACA

Sustainable Urban Mobility
Air Quality, Climate Action & Accessibility

For over six decades, Indo-German Development Cooperation has focused on addressing global development challenges, including energy, environmental degradation, and climate change. One priority area is sustainable urban development, recognizing that by 2050, over two-thirds of the world's population will reside in cities, presenting challenges in mobility, infrastructure, and job opportunities. In response, the "Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SUT)" project was implemented by the Ministry of Housing and Urban Affairs (MoHUA) with support from Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and commissioned by German Federal Ministry for Economic Cooperation and Development

(BMZ). The project preparation and implementation started in August 2017, and it was successfully concluded in June 2022. A detailed compendium of all the activities implemented under SMART-SUT can be accessed via <https://transport.urban-industrial.in/>.

A follow-up technical cooperation project titled 'SUM-ACA', commissioned by BMZ, is now being implemented by MoHUA with support from GIZ. The objective of the project is to enable national, state and municipal institutions in promoting climate and environmentally friendly, low emission and socially balanced urban mobility systems.

SUM-ACA builds upon SMART-SUT, focusing on enhancing partner states and cities'

capabilities to comprehensively address climate protection, air pollution control, and mobility access. It emphasizes strategic competence development for integrated mobility planning in collaboration with partner cities and states, targeting specialists, decision-makers, and relevant national ministries. Additionally, it fosters institutional expertise development to facilitate cooperation across sectors and encourages civil society participation in planning processes. The project also strengthens academic and training institutions, enabling them to develop, implement, and integrate educational programs on climate protection, air quality, mobility access, and green recovery.

Promotion of Transformation to Sustainable and Climate-friendly E- Mobility in India

The Indian Government is pursuing climate-friendly transportation, aligning with COP26 NDCs, including 500GW non-fossil energy by 2030, a 50% renewable energy target, and reduction of one billion tonnes of carbon emissions by 2030. India aims for a 45% reduction in carbon intensity by 2030 and net-

zero emissions by 2070. This transition involves adopting electric vehicles, creating green jobs, and developing renewable energy-powered urban transport infrastructure. GIZ and the Ministry of Heavy Industries (MHI) jointly drive a climate-friendly electric mobility through the project "Promotion of Sustainable

E-Mobility in India. The project is commissioned by the BMZ under GUMP. Adopting an approach with national and local stakeholders promotes horizontal and vertical cooperation processes, enhances implementing structures and bolsters strategic skills.



Green Urban Mobility innovation Living Lab

Under GUMP between the two governments, GIZ in partnership with Bosch Limited, has set up a Green Urban Mobility Innovation Living Lab (GUMILL) in Bangalore in 2022. Supported by BMZ under developePPP funding programme GUMILL will implement sustainable, inclusive, and smart mobility solutions across several Indian cities during the collaboration till July 2024.

The project aims to establish an open innovation ecosystem focused on green urban mobility, benefiting all citizens,

including vulnerable groups. Typically funded and operated by multiple stakeholders, Living Lab in Bangalore brings together stakeholders from the public sector, technology companies, start-ups, and innovators. Key Performance Indicators include showcasing 10 green urban mobility projects for city-scale implementation, engaging at least 2 city administrations in adopting tested technologies, developing a system to improve air quality in Indian cities by 10-15%, and training 50 public sector

stakeholders in the approach.

The approach follows Living Lab principles, emphasizing user-centric innovation, real-life testing, multi-stakeholder participation, iterative co-creation, and a systemic multi-method approach. The project envisions a three-year horizon with potential for expansion across India aiming to build a capable team to sustain the model, offering fee-based services and corporate fundraising with sufficient interest from public and private stakeholders.

UPCOMING EVENTS

Pathways to
Sustainable Mobility
Summit
1 Nov 2023

Workshop on Carbon
Finance and Markets
for Ministry officials
Oct/ Nov 2023

Workshop on Carbon
Finance and Markets
(for cities)
April, 2024

Awareness building
workshop on 3-wheeler
electrification in Surat
TBC

Business models
and policy, regulatory
recommendations V2G
October, 2024

Emergency Response
for Electric Bus Fires
and Best Practices
21- 24 November 2023

Workshop on Fire
Safety for electric
buses in India
January, 2024

Electric bus driver
training for women in
Surat
TBC

Technological overview
and simulation studies
of V2G
August, 2024

Dissemination
workshops of technical
studies by three COEs
TBC



Ministry of Housing and Urban Affairs
Government of India

Contact person for MoHUA
Mr Lalit Kumar,
Under Secretary, Urban Transport-I
Ministry of Housing and Urban Affairs
kumar.lalit@nic.in



Contact person for GIZ
Mr Daniel Ernesto Moser,
India Director Transport, GIZ
daniel.moser@giz.de



Contact person for KfW:
Mr Philipp Wyrusch,
Head, Sustainable Urban Development, KfW
philipp.wyrusch@kfw.de



Contact person for German Embassy:
Ms Caren Blume,
Deputy Head of
Economic Cooperation Delhi
caren.blume@auswaertiges-amt.de