

NEWSLETTER

E-Mobility Investment Platform
for Asia and the Pacific

May 2024

E-mobility support and investment platform updates

The e-mobility platform for Asia and the Pacific recently hosted two community meetings, shedding light on critical aspects of EV battery life cycle development and sustainability. The first one took place on 19th February and focused on the first part of the life cycle, i.e., battery manufacturing and material sourcing. The second one took place on 3rd April focusing on battery recycling, reuse, and repurposing. Effective discussions and knowledge exchange took place through panel sessions, technical presentations, and Menti polls.

The first community meeting, titled '[EV Material Sourcing and Manufacturing](#),' gathered stakeholders to discuss battery production and raw material supply chains. The discussion delved into the complexities of EV manufacturing, touching on raw material extraction, battery production, and supply chain readiness. The discussion highlighted the importance of ensuring sufficient, socially and environmentally sustainable raw material supply to support the exponential growth in EV production and adoption anticipated in the coming years. The need for policies and strategies that encourage private sector investment in EV battery manufacturing more widely in the Asia and the Pacific region.

Continuing the dialogue, the second meeting, '[Sustainable End-of-life Management of EV Batteries](#),' focused on recycling and reuse strategies. Discussions revolved around scaling up sustainable practices in the e-mobility sector. The session delved into

diverse topics, including the benefits of recycling, reducing mineral dependency through recycling, and job creation through domestic value chains. Participants were treated to a detailed overview of reuse and recycling processes, accompanied by challenges and best practices in policy implementation.

The key insights from the two panel discussions are summarised below:

- There is a critical need for sustainable mineral supply due to rapid EV production growth.
- The importance of government policies to support responsible mineral sourcing is crucial.
- The panel emphasized responsible mining practices and environmental standards enforced by initiatives like the EU battery regulation.
- Recycling EV batteries will help abate future demand for raw material mining, stressing the need for effective recycling systems.
- India underlined strict rules for battery waste, including EVs, with set recycling targets and stakeholder enforcement.

Message from ADB

The ADB's Asia and the Pacific Transport Forum 2024 takes place on 14-17 May 2024 in ADB's HQ in Manila, Philippines. This year's event is entitled "Clean Transport For All" featuring electric mobility. We invite all community members of the E-Mobility Platform to join us in the Forum, especially in the e-mobility training session hosted by the platform on Friday, 17 May. More information about the Transport Forum can be found in this newsletter on page 6.

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Carbon Credits for E-Mobility

Koen van Baekel, Director & Advisor on Infrastructure, Transit & Cities at Rebel - Director at Zeroca Carbon Credits for E-Mobility



The global transition towards sustainable transportation has gained significant momentum in recent years. Governments, businesses, and consumers alike are recognizing the need to reduce greenhouse gas emissions. The e-mobility sector has emerged as an important pathway in this endeavour - witnessing increasingly substantial investment towards deployment of electric vehicles, charging infrastructure as well as related technologies and systems. Carbon credits, especially under the new Paris Agreement Art. 6 compliance frameworks, form a potent accelerator for this by bringing results-based finance to OEMs, investors, and operators.

There are several innovative ways of bringing the carbon credit concept to the e-mobility market. These include:

- Specialized Focus: Meeting the specific needs of e-mobility stakeholders requires focused expertise to provide tailored solutions across various e-mobility sectors.
- Carbon Credit Aggregation: Integrating

multiple projects into unified carbon credit programs simplifies acquisition and management for compliance markets, enhancing efficiency and synergy.

- As-a-Service: Offering carbon credits 'as-a-service' relieves stakeholders of upfront costs and administrative burdens, allowing them to focus on advancing e-mobility.

In a simplified example, this is how it works:

- The service provider registers a national aggregator program in a host country.
- Initial program participants active in the host country are a large established bus operator "A" seeking to transition its fleet of 300 diesel buses to e-buses as well as a startup venture "B" rolling out electric motorcycles from a base of 500 units on the road today to a projected 5,000 over the course of the next 5 years.
- The host country has entered into a bilateral agreement with a receiver country.
- The service provider develops and registers the program including the included project activities and required methodologies with the relevant

standard and registries and arranges for its validation.

- The service provider thereafter monitors the resulting emission reductions and on a yearly basis arranges for issuance as carbon credits. It furthermore arranges a purchase agreement with eligible buyers based in the receiver country as well as annual settlement of purchase proceeds and financial flows to program participants.

The combination of aggregation, strong specialization in carbon markets and standards for e-mobility as well as dedication to compliance markets has the potential to:

- accelerate the e-mobility transition.
- rapidly scale national carbon offset programs.
- foster broader collaboration within and across the industry.

Asia EV Outlook: Uzbekistan

Sudhir Gota and Alvin Mejia, Asia Transport Outlook (ATO)

The Asian Transport Outlook (ATO) project - supported by the Asian Development Bank and the Asian Infrastructure Investment Bank - together with the Urban Electric Mobility Initiative (UEMI) and the EU-supported SOLUTIONSplus project, are producing e-mobility profiles that focus on taking stock of the main developments relating to e-mobility transition in Asian economies. This edition of the newsletter presents the profiles for Uzbekistan.

Uzbekistan is embracing a transformative shift towards electric mobility amid its robust economic growth and ambitious green initiatives. With a rapidly growing middle class and urbanization, the country is tackling the challenges posed by traditional transportation, notably air pollution and greenhouse gas emissions.

Despite currently relying on imports for electric vehicles (EVs), Uzbekistan is witnessing a promising surge in e-car

adoption. In 2022, over 5,000 electric cars were sold, marking a significant increase from the previous year. Tashkent City, the capital, spearheaded this trend, accounting for a lion's share of the sales. Uzbekistan's electrification drive gains momentum through key partnerships: UzAuto Motors and BYD Auto form a joint venture for plug-in hybrid EVs with a 50,000 vehicle annual production target, while ADM Jizzakh teams up with Chery International for local hybrid and electric car manufacturing.

Policy support is instrumental in this transition. Uzbekistan has introduced a slew of incentives, including tax exemptions and interest rate subsidies, to promote domestic EV production and adoption. A presidential decree mandates expanding charging infrastructure, with plans to equip key locations along highways with stations by 2024.

The government's visionary policies and international collaborations, like ADB's support, underscore Uzbekistan's commitment to advancing sustainable mobility.



Detailed report can be found [here](#)



Webinar Series

E-mobility Support and Investment Platform for Asia & Pacific

The Asia and the Pacific e-mobility platform delivered six interesting webinars between January and March 2024. The key outcomes of those webinars were:

17th Jan

[Click to view recording.](#)

E-mobility Trends and Policy Measures: A Peek into Asia and the Pacific

Alvin Mejia, Director, Analysis & Impact at Urban Electric Mobility Initiative; Team Member, Asian Transport Outlook

Asia shapes global e-mobility with integrated policies and cross-country learning on targets, incentives, and infrastructure.



31st Jan

[Click to view recording.](#)

Implementing Micro Mobility Effectively

Tom Fleming, Associate at Integrated Transport Planning

Micro-mobility's flexibility challenges definition; electrification enhances options, but infrastructure quality is vital for success.



14th Feb

[Click to view recording.](#)

Accelerating Adoption of E-Mobility in Malaysia

Nur Zuriyany binti Zaki, Senior Analyst at Malaysia Green Technology and Climate Change Corporation

EV adoption in Malaysia surged with incentives and GEF-supported projects for sustainable charging and battery solutions.



28th Feb

[Click to view recording.](#)

Battery Passport Pilot Scheme

Inga Petersen, Executive Director at Global Battery Alliance

Batteries are key for the green transition; scalable, responsible value chains with tools like the Battery Passport enhance sustainability and transparency.



13th Mar

[Click to view recording.](#)

Developing Inter-Urban EV Charging Network in Bangladesh

Koen van Baekel, Director & Advisor on Infrastructure, Transit & Cities at Rebel Group

"Dig Once" toolkit integrates EV charging into road and energy networks efficiently through collaborative policymaking and strategic planning.



27th Mar

[Click to view recording.](#)

Accessing Green Finance

Devindranauth Bissoon, Senior Infrastructure Specialist at Green Climate Fund

Blended finance is essential for funding low-emission transport projects to achieve the 1.5°C scenario and enhance climate resilience.



During Q2, the E-Mobility Platform's webinar series continues. During this quarter, the emphasis has been on providing a deeper understanding of the e-mobility landscape in Asia and the Pacific. Join our speakers from 15:00-15:45 (Philippines Standard Time)

10th Apr

[Click to view recording.](#)

Opportunities for Second Life Batteries and BESS in DMCs

Yu Tack Kim, Adjunct Professor at Dongshin University

Examine the importance of battery reuse for a circular economy given and how to address the challenges of scarcity and supply chain vulnerability.



24th Apr

[Click to view recording.](#)

EV Second-hand Market Development: Korean Case Study

Jiwoon Kang, Senior Transport Specialist at Asian Development Bank

Explore the development of the second-hand EV market in Republic of Korea and the implications and learnings for DMCs.



08th May

[Click to view recording.](#)

Accelerating Freight Decarbonization in Asia: Lessons from eFAST India

Sharvari Patki, Program Head, Electric Mobility, WRI India

This webinar delves into the impactful learnings and experiences from eFAST India, country's first national freight platform dedicated to accelerating freight electrification.



22nd May

[Click to register.](#)

Developing a Robust EV industry to Accelerate E-Mobility Adoption in the Philippines

Rafaelita M. Aldaba, Undersecretary at Department of Trade and Industry.

Understand the vital contribution EVs are making to economic growth, job creation and innovation in the Philippines.



05th Jun

[Click to register.](#)

Learnings from Implementing Urban Living Lab to Accelerate E-Mobility in Emerging Economies

Shritu Shrestha, Senior Researcher at Wuppertal Institute

Investigate the work of Urban Living Labs and their role in accelerating EV adoption to help deliver global climate and sustainability goals.



19th Jun

[Click to register.](#)

Electrifying Petrol-Powered Motorcycles in Indonesia

Michael CHANG, Global Team Manager at BlueWing Motors

Learn how BlueWing Motors has been enabling the transition to e-motorcycles in Indonesia and how they have been working with major companies to help demonstrate social impact.



News in short...

ADB Funds Wyntron for EV Charging Equipment Manufacturing

ADB and Wyntron Inc. have closed a \$20 million loan to expand EV charger manufacturing in the Philippines. The funds will upgrade production facilities in Cavite Industrial Park, increasing production of AC EV charger stations for residential and commercial use. This supports global EV decarbonization efforts and creates jobs. ADB will also assist Wyntron in developing a gender action plan to enhance women's participation in management and engineering roles.

Read more here: [ADB Provides \\$20 Million Loan to Wyntron to Manufacture EV Charging Equipment in the Philippines](#)

ADB Supports Tegeta Holding's Green Bond for Georgia's EV Expansion

The Asian Development Bank (ADB) will invest 20 million lari in Tegeta Motors' debut green bond on the Georgian Stock Exchange. This lari-denominated bond funds zero-emission vehicles and expands Georgia's EV charging network by 70 stations. ADB's Suzanne Gaboury emphasizes support for Georgia's capital markets, anticipating more green bond issuances. Tegeta's Vakhtang Kacharava underscores their commitment to sustainability. This investment aligns with ADB's goal of fostering a resilient and sustainable Asia-Pacific.

Read more here: [ADB Invests in Tegeta Holding's Green Bond Issuance to Expand EV Use and Charging Networks in Georgia](#)

ADB Readies ASEAN Climate Finance Policy Platform

ADB President Masatsugu Asakawa announced plans to launch an ASEAN Climate Finance Policy Platform in Luang Prabang. The platform will assist Southeast Asian finance leaders in tackling climate change through strengthened economic and fiscal policies. Asakawa emphasized the urgency of climate action during the High-Level Policy Dialogue of ASEAN Finance Ministers. The platform aims to enhance collaboration among finance ministries and support capacity-building for evidence-based climate policies, with ADB providing technical assistance.

Read more in ADB Brief: [ADB Readies ASEAN Climate Finance Policy Platform](#)

GCF-ADB E-Mobility Program

The Green Climate Fund (GCF) supports ADB's regional E-Mobility Program to scale up e-mobility by addressing the nexus between climate change, transport, energy, poverty, and gender inequality. It will deploy electric buses, upgrade the public transport system, and support non-motorized transport. The program is expected to comprise a total investment of USD 454.40 million, of which USD 169.92 million is contributed by GCF financing. 26% of the GCF investment is for adaptation and 74% for mitigation.

The program will provide loan and grant financing to increase climate resilience of urban transport infrastructure, deploy public transport and non-motorized transport measures to promote sustainable urban development, deploy electric bus fleets including charging infrastructure, bus

depots and associated grid connections in eligible countries. Further, these countries can access technical assistance to improve enabling conditions and their readiness for mass deployment of electric buses, applying innovative business models as appropriate. Such models may include, for example, efficient operations of services and private sector participation. Measures to improve the skills of people involved in the field of electric mobility will also be looked into.

The countries covered by the programme include Armenia, Georgia, Indonesia, Kazakhstan, Kyrgyz Republic, Nepal, and Uzbekistan. Mass deployment of electric buses at a regional scale will provide a critical momentum to allow for economies of scale and to create a visible impact to demonstrate low-carbon pathways for future

mobility. Adaptation measures to strengthen resilience of the urban transport system will be undertaken in priority countries with higher levels of readiness, to demonstrate innovative solutions that can be replicated in other countries.

The program serves as a market accelerator facilitating a paradigm shift. Its goal is to create an urban ecosystem conducive to electric vehicles (EVs), encouraging commercial EV investment. The program promotes a shift to low-carbon, resilient, and appealing public transport systems, reversing declining public transport use and enhancing urban resilience. Lessons learned will inform cost-effective approaches to reduce urban transport infrastructure vulnerability, with successful strategies replicated in ADB's future transport projects.



Further details for the Forum can be found [here](#)

Asia And The Pacific Transport Forum 2024

14-17 May | ADB Headquarters, Manila, Philippines

The forum aims to:

- Present the solutions for transport to deliver on global commitments on transport-related SDGs and on Paris Agreement commitments;
- Provide an opportunity for representatives of the region's transport expert community to develop a greater understanding on key transport issues in the present and near future;
- Allow those working on real-world sustainable transport solutions such as policy makers, thought leaders, and practitioners to discuss their experiences; and
- Engage discussions between ADB and its DMCs, private sector clients, and development partners on the challenges and opportunities facing the transport sector

During the Transport Forum 2024, the **E-Mobility Platform** hosts a training session on **"Ramping Up Electrification of Transport"** on Friday, May 17, from 9:00 to 12:30. This session focuses on

accelerating e-mobility in ADB's Developing Member Countries (DMCs), covering regional e-mobility market status, emerging technologies, necessary policy and financing measures, and social aspects like the Just Transition framework. Lessons from ongoing regional projects, including GEF-financed e-mobility initiatives, will be shared to enhance e-mobility ambition.



The Asia-Pacific Transport Forum 2024, hosted by ADB in Manila on 14-15 May (with training on 16-17 May), will spotlight ADB's role as a climate bank. Discussions will center on decarbonizing transport and bolstering climate-resilient infrastructure. ADB's support for the transport sector, addressing climate change and sustainable development, will highlight its role in fostering development.

Topics include gender, social development, digitalization, rail, urban transport, smart mobility, road safety, and operations. The forum aims to showcase ADB's technical and financial aid and equip officials from member countries with insights into regional transport challenges and solutions, aligning with the objective to "build forward better."



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