



Image: e-Trike in the Philippines | Credit:ADB

ADB Virtual Training Program and Special Webinar on Electric Mobility

Event Details

ADB Virtual Training Program on Electric Mobility

12 training modules from 10 February to 21 March 2022 | Virtual

- Module 1 | Introduction to electric mobility (e-mobility)
- Module 2 | Determination of environmental impacts
- Module 3 | E-buses and charging options
- Module 4 | Other electric vehicles including e-taxis, electric passenger cars, electric 2-wheelers, e-trucks, e-vessels including their charging options
- Module 5 | Hydrogen and ammonia production and usage in transportation
- Module 6 | Clinic 1 - Devil's advocate
- Module 7 | Grid impacts and solutions
- Module 8 | Battery recycling, re-usage and regulations
- Module 9 | Business models and financial structuring of projects
- Module 10 | Policies, incentives, and regulations for promoting e-mobility
- Module 11 | Clinic 2 - Fine-tuning of project assignment
- Module 12 | Closing

E-mobility Special Webinar

A pre-event of the [Asia and the Pacific Transport Forum 2022: Accelerating Transformative and Decarbonized Transport](#)
1 April 2022 | Virtual

Moderator for Session 1: Pamela Chiang, Senior Transport Specialist, ADB

Speaker representing ADB Urban Sector Group and UCCRTF (Session 1): Virinder Sharma, Principal Urban Development Specialist, SDCC, ADB

Nine (9) speakers from Green Climate Fund, Global Environment Facility, UN Environment Programme (UNEP), Climate Compatible Growth Fund, and ADB.

Four (4) speakers from Maldives, India, Indonesia, and Kyrgyz Republic

Led by the ADB Transport Sector Group, twelve (12) training modules ran for five (5) weeks and explored new opportunities for transport-energy-urban nexus solutions. Several exciting transport-energy project ideas emerged from participants, creating renewed momentum in supporting developing member countries (DMCs) on transformational pathways towards decarbonizing transport.

A special webinar on e-mobility, organized by ADB and UNEP as pre-event to the Asia and the Pacific Transport Forum, also brought together potential sponsors/ funders for e-mobility deployment in countries.

Electric vehicles (EV) as a promising low carbon transport option for DMCs

EV ambitions are becoming important transport policy target for DMCs. With the advancement of battery technology and increasing production of electric vehicles, the transformation of transport modes is changing rapidly which is seeing increasing electrification across transport modes beyond passenger cars and buses, but also into small and medium sized boats, and two and three wheelers, often featured in informal transport in many DMCs for first and last-mile connectivity.



A training program to scale up knowledge on e-mobility and identify project ideas

A virtual training program on electric mobility was held under [TA9420: Implementation of Sustainable Transport for All](#) and with support from UCCRTF. TA 9420 aims to enhance ADB's sustainable transport operations by providing support for project preparation, implementation, and capacity development. It has been being implemented in collaboration with Grutter Consulting.

The objective of the training was to scale-up technical knowledge and awareness on e-mobility, promote knowledge sharing amongst participants, and to provide opportunity for participants to identify and co-create e-mobility project ideas that could potentially inform future investment pipelines for respective DMCs.

Organized by the Transport Sector Group, it was the first of its kind that brings together three sectors of ADB – transport, energy, and urban sector groups – and served as a platform for ADB and its DMCs to co-create new project opportunities in the course of two (2) months.



Image: E-boat taxis launched in Batam Indonesia in October 2021 (part of the UCCRTF-supported TA 9420)

The training was attended by 26 government representatives (India, Bangladesh, Nepal, China, Mongolia, Vanuatu, Cook Island, Tuvalu, Fiji, Kiribati, Armenia, Indonesia, Thailand, and Philippines) and ADB project officers across transport, energy, urban, and private sector operations departments.

The training discussed and explored key topics related to e-mobility including latest state-of-the-art technological development across transport modes (e-buses, e-taxis, e-fishing boats, electric passenger cars, electric 2-wheelers, and e-trucks), impacts and methodologies for determination of greenhouse gas emissions, local pollution and noise impact, batteries and charging options, hydrogen and ammonia production and usage in transportation, business models, grid resilience and enabling policy and financing environments.

“The acceptance of electric vehicle is not only based on the environmental concern but also based on the economic and energy security concerns.”

James Leather, Chief of the Transport Sector Group, ADB

E-mobility special webinar under the Asia and the Pacific Transport Forum 2022

The training program was followed by a special webinar on e-mobility, a pre-forum event of the Asia and the Pacific Transport Forum 2022. Organized by ADB and UNEP, this special webinar convened potential project sponsors and government stakeholders involved in

implementing future e-mobility projects and programs, and had them share their experience and knowledge to accelerate the uptake of e-mobility as a means of decarbonizing transport. Speakers from Green Climate Fund, Global Environment Facility, Climate Compatible Growth Fund, UNEP, and ADB shared their initiatives, and representatives from DMCs including Maldives, India, Indonesia, and Kyrgyz Republic shared their experiences and challenges in scaling up e-mobility in their countries.

Virinder Sharma (ADB) presented the Urban Resilience Trust Fund, the second phase of the Urban Climate Change Resilience Trust Fund (UCCRTF), as potential funding source for innovative e-mobility projects. URTF (2021-2028) is a US\$100 million trust fund administered by ADB with contribution from the UK Foreign, Commonwealth and Development Office.

“A sector like transport cannot decarbonize on its own. We need collaborative efforts with energy sector and cross-thematic solutions to take care of environmental and climate aspects.”

Pamela Chiang, Senior Transport Specialist, ADB

“UCCRTF emphasizes that ADB projects address conventional barriers in secondary cities, provide enablers, and address issues along the e-mobility value chain.”

Virinder Sharma, Principal Urban Development Specialist, ADB

Virinder also shared the lessons learned from the UCCRTF-supported pilot e-mobility projects including the e-buses and e-rickshaws in Visakhapatnam (India), e-rickshaws for last mile connectivity especially for women in Sialkot (Pakistan), e-taxis and e-fishing boats in Indonesia and Philippines, city-level e-mobility planning for Hue and Hai Phong (Viet Nam), Makassar (Indonesia), Yangon (Myanmar), and Kathmandu (Nepal), and other cities.

Key takeaways

- The global vehicle fleet is set to double by 2050, with more than 90% of future vehicle growth projected to take place in low and middle-income countries, particularly in cities. E-mobility present a tremendous opportunity to transform cities low carbon and environmentally sustainable.
- E-mobility is an important tool in the toolbox of options to decarbonize transport. It cuts across different themes such as livable cities, advanced technology, clean energy, climate change and the environment.
- Integrated solutions are necessary to tackle shared challenges in achieving a carbon neutral future. Under the Paris Alignment Framework, it is no longer possible for ADB to look at transport projects without assessing the energy sources and the DMC's respective decarbonization plans.
- E-mobility is one of the seven (7) thematic areas of URTF. The trust fund will emphasize the need to maximize the potential of e-mobility and its associated multi-benefits (socio, economic, environmental, climate change); ensure alignment in the upstream strategy, policy and planning; and enhance preparedness actions and implementation readiness of e-projects.

Further Information

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This Event Snapshot is published under [TA 9217](#) Knowledge Management and Resilience Measurement for Urban Climate Change Resilience (UCCRTF Subproject 2) | [Subscribe](#) to UCCRTF's bi-monthly newsletter | Access past issues of UCCRTF newsletter [HERE](#).

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