

ADB's Journey in Promoting Private Sector Sustainable Transport in Southeast Asia



Sustainable Transport Achievements: Our Role and Impact in Southeast Asia

Our Role Our Impact Concessional Finance \$686 million **Parallel** Loans \$686 **Mobilized Private Sector Financing** million 1,325 27 1,500 **ADB** >1,000 For sustainable transport projects **MRT Lines** E-ferries E-Tuktuks E-Buses EV charging locations Reducing GHG emission by over 70,000 tons of CO₂ annually **Bangkok MRT Project Philippines EV Charger Production Bangkok MRT E-Ferries** (Pink and Yellow Lines) **Expansion** First commercial scale ADB's first private sector sustainable ADB's first loan to the EV industry transport financing in Southeast Asia e-ferry fleet in Southeast Asia value chain in the Philippines 2018 2020 2022 2023 2024 **Thailand Green Loan for** Vietnam Green Bangkok Public Transport E-Tuktuks **Bangkok** Electrification for Bus Fleet **EV Charging Network** Loan for E-Mobility and PRC EV Batteries ADB's first financing of EV charging First e-bus fleet and EV charging First e-tuktuk fleet in ADB's first e-bus financing in Thailand network and first green loan for network in Vietnam Thailand e-mobility in Thailand



Bangkok Mass Rapid Transit Project (Pink and Yellow Lines)



Key Financing and Project Features

	Pink Line	Yellow Line
Borrower ¹	Northern Bangkok Monorail	Eastern Bangkok Monorail
ADB Financing ²	\$159 million	\$159 million
Distance	30 km	35 km
Contract Type	Public-Private Partnership (PPP)	
Status	Test run within 2023	In Operation

^{1/} The Borrower of each line is owned by BTS Group Holdings Public Company Limited (BTSG) (75% shareholding), Sino-Thai Engineering and Construction Public Company (15%) and Ratchaburi Electricity Generating Holding Public Company (10%). 2/ ADB financing is in THB, in amount of THB4,949 million for each line. The figures are in THB equivalents.

ADB's Value Addition

- ADB provided a loan with longer tenor and back-ended repayment profile to mitigate the ridership risk following the expiry of the government subsidy. This financing serves as a confidence-building signal to other financiers and investors, playing a pivotal role in catalyzing commercial funding for the mass rapid transit sector.
- By supporting the Thai mass rapid transit sector operations, ADB financing contributed to the promotion of the PPP schemes. Additionally, it gave assurance to the Thai government that ADB's support is available regardless of the PPP scheme applied to individual lines.



Thailand Green Loan for Electric Vehicle Charging Network



Key Financing and Project Features

Borrower	Energy Absolute Public Company Limited	
ADB Financing ¹	\$50 million	
Purpose	To support a comprehensive electric vehicle charging network, as well as two operating solar and wind projects in Thailand.	
Tenor	3 years	

^{1/} ADB financing is in THB, in amount of THB 1.5 billion. The figure is in THB equivalents.

ADB's Value Addition

- Ensured compliance with the Green Loan Principles and certification by the Climate Bonds Initiative under the Climate Bonds Standard and Certification Scheme.
- Supported the implementation of one of Southeast Asia's largest electric vehicle charging networks, driving Thailand's transition from its
 conventional automotive landscape towards a burgeoning EV industry.
- Sustained the development of sustainable transport activities in Thailand at a time when capital markets experienced disruptions caused by the COVID-19 pandemic.
- Promoted higher standards including environmental and social management systems.



Bangkok Mass Rapid Transit Electric Ferries



Key Financing and Project Features

Borrower	E Smart Transport Company Limited	
ADB Financing ¹	\$8.3 million consisted of 1) \$4.7 million ADB loan 2) \$3.6 million CTF loan administered by ADB	
Purpose	To develop and operate 27 e-ferries for mass rapid transport along the Chao Phraya River in Bangkok, Thailand	
Tenor	10 years	

1/ ADB OCR financing is in THB, in amount of THB 160 million. The figure is in THB equivalents.

ADB's Value Addition

- ADB's early involvement in transaction structuring helped address the key risks such as the ridership and technology risk. The mitigation of key risks helped catalyze participation from the co-financiers.
- Mobilized CTF concessional funding with an innovative blended finance structure to improve project bankability.
- Supported technical and safety due diligence which was shared with all lenders. ADB's assistance improved the e-ferries standards for environmental, social, and gender-inclusive aspects.

One ADB Collaboration

 The project has benefited from close One ADB collaboration with CCSD and SERD, including technical assistance (TA) supported by CCSD to conduct technical due diligence that was provided to all lenders, and TA supported by SERD to support Thailand's Office of Transport and Traffic Policy and Planning to accelerate connectivity and expansion of Bangkok's multimodal integration network, including electric public transport.



Vietnam Green Loan for Electric Mobility



Key Financing and Project Features

Borrower	VinFast Trading and Production Joint Stock Company	
ADB Financing	\$48 million consisted of 1) \$20 million ADB loan 2) \$28 million concessional financing ¹	
Purpose	To support the manufacturing of e-bus fleet and EV charging network in Vietnam.	
Tenor	7 years	

1/ \$25 concessional loan and \$3 grant. Concessional financing is utilized from ADB's managed trust funds comprising the Australian Climate Finance Partnership funded by the Australian Government (ACFP); CTF; and the Climate Innovation and Development Fund (CIDF).

ADB's Value Addition

- Led the syndication of the climate finance package which consists of \$20 million ADB loan, \$87 million parallel loan facilitated by ADB
 as mandated lead arranger, and \$28 million concessional financing to support the Borrower's sustainable expansion into the EV
 business.
- Improved standards for environmental and social actions in compliance with ADB's rigorous environmental and social safeguard standards.
- Longer tenor financing than offered by commercial lenders including concessional finance, to help support the Borrower during the ramp-up stage.

One ADB Collaboration

• ADB, led by Viet Nam Resident Mission under SERD, provided TA which focused on raising public awareness about e-mobility and promoting the role of women studying for or working in science, technology, engineering, and mathematics (STEM) fields.



Philippines EV Charger Production Expansion



Key Financing and Project Features

Borrower	Wyntron Inc.	
ADB Financing	Up to \$20 million	
Purpose	To support capital expenditure for the expansion of electric vehicle (EV) charger production facilities in the Philippines.	
Tenor	6 years	

ADB's Value Addition

- The project contributed to the readiness of the country to transition to EVs by increasing local production capacity of EV chargers.
- Improved standards for environmental and social actions in compliance with ADB's rigorous environmental and social safeguard standards.
- Accelerated progress in gender equality by developing a gender and diversity procurement policy, increasing female participation in technical- and management- related training, and developing in-house capacities to train staff in anti sexual harassment and gender equality.



Bangkok Public Transport Electrification for Bus Fleet



Key Financing and Project Features

Borrower	Energy Absolute Public Company Limited	
ADB Financing ¹	\$37 million	
Purpose	the support the procurement of around 1,200 e-buses to be used for public bus transportation services in Bangkok, Thailand.	
Tenor	6 years	

^{1/} ADB financing is in THB, in amount of THB 1.3 billion. The figure is in THB equivalents

ADB's Value Addition

- Led the structuring, due diligence, and mobilizing of cofinancing from other development finance institutions of \$74 million.
- Improved standards for environmental and social actions in compliance with ADB's rigorous environmental and social safeguard standards.
- ADB financing would be one of the first large-scale financing of e-buses used for public transport and can potentially have a high demonstrative impact, catalyzing commercial financing in the future to accelerate the deployment of e-buses and promoting delivery of a scalable model for EVs for future transactions.
- ADB provided TA to support public bus market due diligence, which was relied upon by all lenders when evaluating the transaction.

One ADB Collaboration

 The project demonstrated One ADB collaboration between ADB's PSOD and SERD including TA funded by SERD's ASEAN Catalytic Green Finance Facility to support the comprehensive market study on public bus electrification in Bangkok.



Thailand Electric Tuktuks and PRC Lithium-Ion Batteries



Key Financing and Project Features

Borrower	Banpu Public Company Limited
ADB Financing ¹	\$81.3 million consisted of 1) \$70.6 million ADB OCR loan 2) \$10.7 million CTF loan administered by ADB
Purpose	 To support the procurement of up to 1,500 e-tuktuks and charging stations for micro transit services in Bangkok, Thailand To support the expansion of a lithium-ion e-mobility battery manufacturing facility in Jiangsu, the PRC
Tenor	5-7 years

1/ ADB OCR financing is in THB, in amount of THB 2.4 billion. The figure is in THB equivalents

ADB's Value Addition

- Supported the pioneering e-tuktuk service, mitigating the capital risk associated with the Borrower's novel micro-transit venture
- Improved standards for environmental and social actions in compliance with ADB's rigorous environmental and social safeguard standards.
- Accelerated progress in gender equality by empowering females with improved mobility through a safer and more reliable tuktuk service, and by encouraging their increased use of public transport.
- ADB provided TA to support a market study on the urban mobility landscape in various Southeast Asian countries, thereby demonstrating significant impact by catalyzing the replication of BANPU's e-tuktuk operation across the region.

One ADB Collaboration

The project has benefited from close One ADB collaboration between ADB's PSOD, CCSD, and SERD including TA to support
Bangkok's transportation sector study, GHG emission reduction study, and Southeast Asia's micro transit study for the project.

