UNEP Green Freight Programme

ESCAP Regional Meeting

September 25, 2024

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Structure of the Global Electric Mobility Programme (in 2024)

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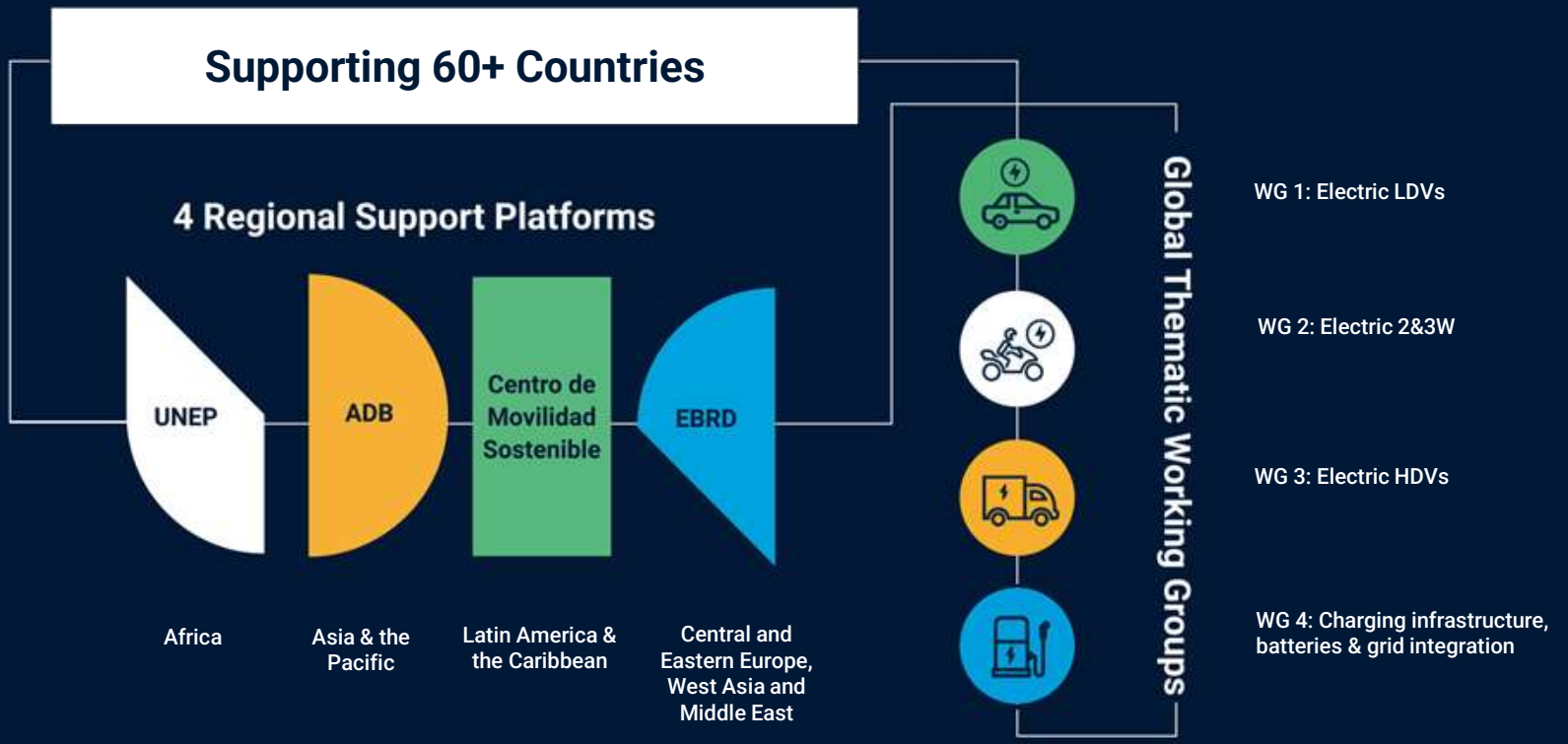



About the Regional Support and Investment Platforms



The Regional Platforms are open to all countries and cities in the region, interested in developing electric mobility projects.



About the Country Projects

Building capacity and creating awareness

Establishing roadmaps and strategies

Developing national policy frameworks

Creating business models and finance schemes

Piloting electric vehicles on the ground





Africa		
Burundi		UNEP
Cote d`Ivoire		UNEP
Ethiopia		UNEP
Ghana		UNEP
Kenya		UNEP
Madagascar		UNEP
Mauritius		UNDP
Mozambique		UNEP
Rwanda		UNEP / SOL+
Senegal		UNEP
Seychelles		UNEP
Sierra Leone		UNEP
South Africa		DBSA
Tanzania		UNEP / SOL+
Togo		UNEP
Tunisia		UNIDO
Uganda		UNEP
Zambia		UNEP

Asia		
Bangladesh		UNDP
India		UNEP / ADB
Indonesia		UNDP
Malaysia		UNIDO
Maldives		UNEP
Nepal		UNEP / SOL+
Philippines		UNEP / SOL+ UNIDO
Sri Lanka		UNEP
Thailand		UNEP / UNIDO
Viet Nam		UNEP / SOL+

Central & Eastern Europe, West Asia, Middle East		
Uzbekistan		UNDP
Albania		UNIDO
Ukraine		UNEP / EBRD
Belarus		UNDP
Armenia		UNEP
Jordan		UNIDO

Latin America & the Caribbean		
Antigua & Barbuda		UNEP
Argentina		UNEP
Belize		UNEP
Colombia		UNEP
Costa Rica		UNEP
Chile		UNEP
Dominican Republic		UNEP
Ecuador		UNEP / SOL+
El Salvador		UNEP
Grenada		UNEP
Guatemala		UNEP
Honduras		UNEP
Jamaica		UNDP
Nicaragua		UNEP
Panama		UNEP
Paraguay		UNEP
Peru		UNDP
St. Lucia		UNEP
Uruguay		SOL+

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About the Global Thematic Working Groups



2&3 Wheelers

Light-Duty Vehicle

Heavy-Duty Vehicle

Charging, Grid Integration, Renewable Power Supply and Batteries

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International Energy Agency

- Develop and discuss global and regional targets for the shift to electric mobility;
- Provide policy advice and bring forward the global harmonization of e-mobility standards and regulation;
- Develop analytical tools and knowledge products to support e-mobility projects world-wide
- Support e-mobility pilots with technical guidelines, methodologies for data collection and reporting;
- Develop business models and finance schemes ready for adaptation in national projects
- All knowledge products will be accessible through the e-mobility toolbox https://emobility.tools/

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Structure



7 Focus areas for the Green Freight Programme

1. Green freight ecosystem	2. Supportive policy	3. Research & Capacity building	4. Emissions accounting	5. Greening existing fleet	6. Electric Freight	7. Scaling up

1

Activities



Green freight ecosystems, Focus on Government

1. Green Freight Corridor as a sub-regional approach
2. Sub-regional coordination mechanisms
3. Support the Global MOU for ZE-MHDVs

2

Activities



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1. Green freight ecosystem
2. Supportive policy
3. Research & Capacity building
4. Emissions accounting
5. Greening existing fleet
6. Electric Freight
7. Scaling up

Supportive policy development, focus on national and regional

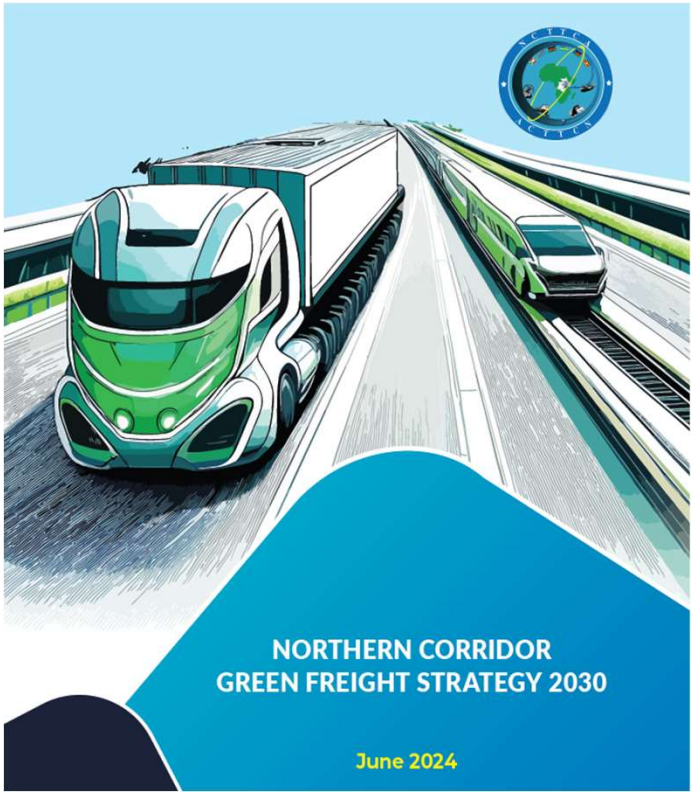
1. Development of Green Freight Strategies
2. Sub-regional policy harmonisation
3. Invest in end-of-life and sustainability regulations

2

Activities



Supportive policy development, focus on national and regional



3

Activities



1. Green freight ecosystem
2. Supportive policy
3. Research & Capacity building
4. Emissions accounting
5. Greening existing fleet
6. Electric Freight
7. Scaling up

Research & Capacity building, focus on knowledge gaps

1. Knowledge product development – Green Freight Corridor WGs
2. Knowledge exchange – South-South knowledge transfer
3. Research capacity development

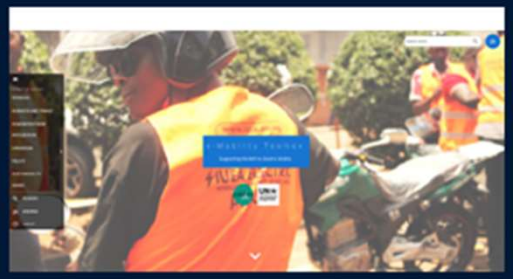
3 Activities



1. Green freight ecosystem
2. Supportive policy
3. Research & Capacity building
4. Emissions accounting
5. Greening existing fleet
6. Electric Freight
7. Scaling up

Research & Capacity building, focus on knowledge gaps

All e-mobility knowledge products including policy briefs, technical guidelines, business models, financing schemes are accessible through the online E-mobility toolbox: https://emobility.tools/



Global Electric Mobility Toolbox

https://emobility.tools

4

Activities



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1. Green freight ecosystem
2. Supportive policy
3. Research & Capacity building
4. Emissions accounting
5. Greening existing fleet
6. Electric Freight
7. Scaling up

Harmonise emissions accounting, focus on regional cooperation

1. Support uptake of the GLEC framework
2. Invest in emission baselining
3. Support creation of regional emission intensity factors
4. Training in MRV
5. Air quality regulations – Building on UNEP AQ team

4

Activities



UN environment programme

1. Green freight ecosystem
2. Supportive policy
3. Research & Capacity building
4. Emissions accounting
5. Greening existing fleet
6. Electric Freight
7. Scaling up

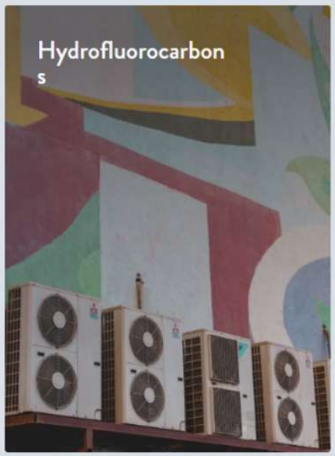
Harmonise emissions accounting, focus on regional cooperation

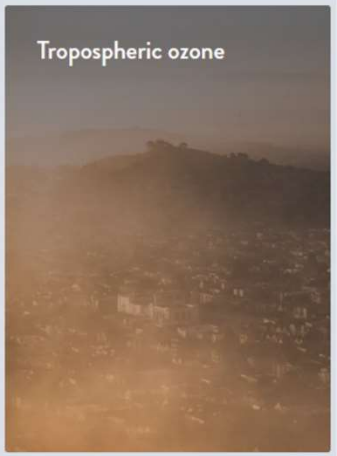
CLIMATE & CLEAN AIR COALITION
TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS

a UNEP convened initiative









4

Activities



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Harmonise emissions accounting, focus on regional cooperation

The Real Urban Emissions (TRUE) Initiative - Kampala



5 Activities



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1. Green freight ecosystem
2. Supportive policy
3. Research & Capacity building
4. Emissions accounting
5. Greening existing fleet
6. Electric Freight
7. Scaling up

Greening the existing fleet, focus on regulations and standards

1. Clean fuel regulations – Building on PCFV work
2. New/used HDV import regulations
3. Support eco-driving training with partners
4. Vehicle/maintenance standards

5 Activities



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Greening the existing fleet, focus on regulations and standards

GFEI TARGETS

Passenger light-duty vehicle targets
Double global fuel economy of new vehicles by 2030, reduce CO_2 emissions by **90%** by 2050

2030 — 50%

2050 CO_2 90%

Heavy-duty vehicle targets
Improve new vehicle fuel consumption **35%** by 2035 - CO_2 reduction target of **70%** by 2050

2035 — 35%

2050 CO_2 70%

Transit bus targets
Improve fuel economy to reduce CO_2 emissions by **65%** by 2035 and **95%** by 2050

2035 CO_2 65%

2050 CO_2 95%

Two & three wheel vehicle targets
Improve fuel economy to reduce CO_2 emissions by **80%** by 2035 and **95%** by 2050

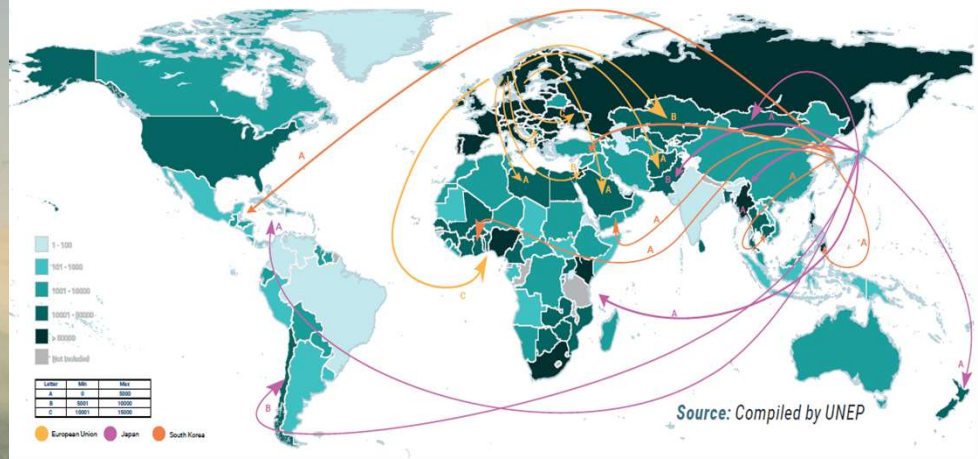
2035 CO_2 80%

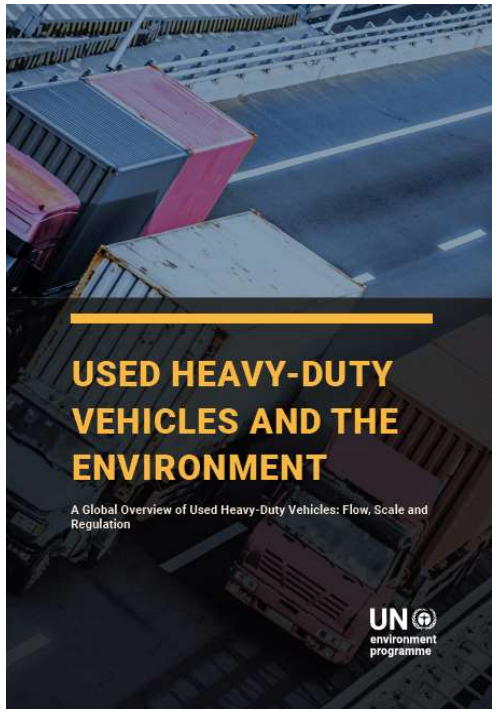
2050 CO_2 95%

5 Activities



Greening the existing fleet, focus on regulations and standards





https://www.unep.org/resources/report/used-heavy-duty-vehicles-and-environment-global-overview-used-heavy-duty-vehicles

6

Activities



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Electric Freight transition, focus on laying the groundwork

1. First / Last mile urban logistics
2. E-truck pre-feasibility studies
3. TCO methodologies and tools
4. Procurement guidelines
5. Electric truck pilots
6. Charger infrastructure and grid preparedness studies

6 Activities



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Electric Freight transition, focus on laying the groundwork

Africa	
Burundi	UNEP
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Ghana	UNEP
Kenya	UNEP
Madagascar	UNEP
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Maldives	UNEP
Nepal	UNEP / SOL+
Philippines	UNEP / SOL+ UNIDO
Sri Lanka	UNEP
Thailand	UNEP / UNIDO
Viet Nam	UNEP / SOL+

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Albania	UNIDO
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Colombia	UNEP
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Chile	UNEP
Dominican Republic	UNEP
Ecuador	UNEP / SOL+
El Salvador	UNEP
Grenada	UNEP
Guatemala	UNEP
Honduras	UNEP
Jamaica	UNDP
Nicaragua	UNEP
Panama	UNEP
Paraguay	UNEP
Peru	UNDP
St. Lucia	UNEP
Uruguay	SOL+

GEMP 60+ country projects

6

Activities



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1. Green freight ecosystem | 2. Supportive policy | 3. Research & Capacity building | 4. Emissions accounting | 5. Greening existing fleet | **6. Electric Freight** | 7. Scaling up

Electric Freight transition, focus on laying the groundwork

Transformative Action for Heavy-duty Vehicles in the ASEAN Region

icct THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION

CLIMATE & CLEAN AIR COALITION TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS

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Heavy-Duty Vehicle Electrification:

Technical Workshop on Technology Pathways

7

Activities



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Scaling up green freight, focus on innovative finance

1. Explore scrappage schemes
2. Loan de-risking
3. First-loss guarantees
4. Other innovative financing arrangements

7 Activities



Scaling up green freight, focus on innovative finance

Global Thematic Working Group on Innovative finance and scale-up

gef

GREEN CLIMATE FUND

THE WORLD BANK
IBRD · IDA

European Bank
for Reconstruction and Development

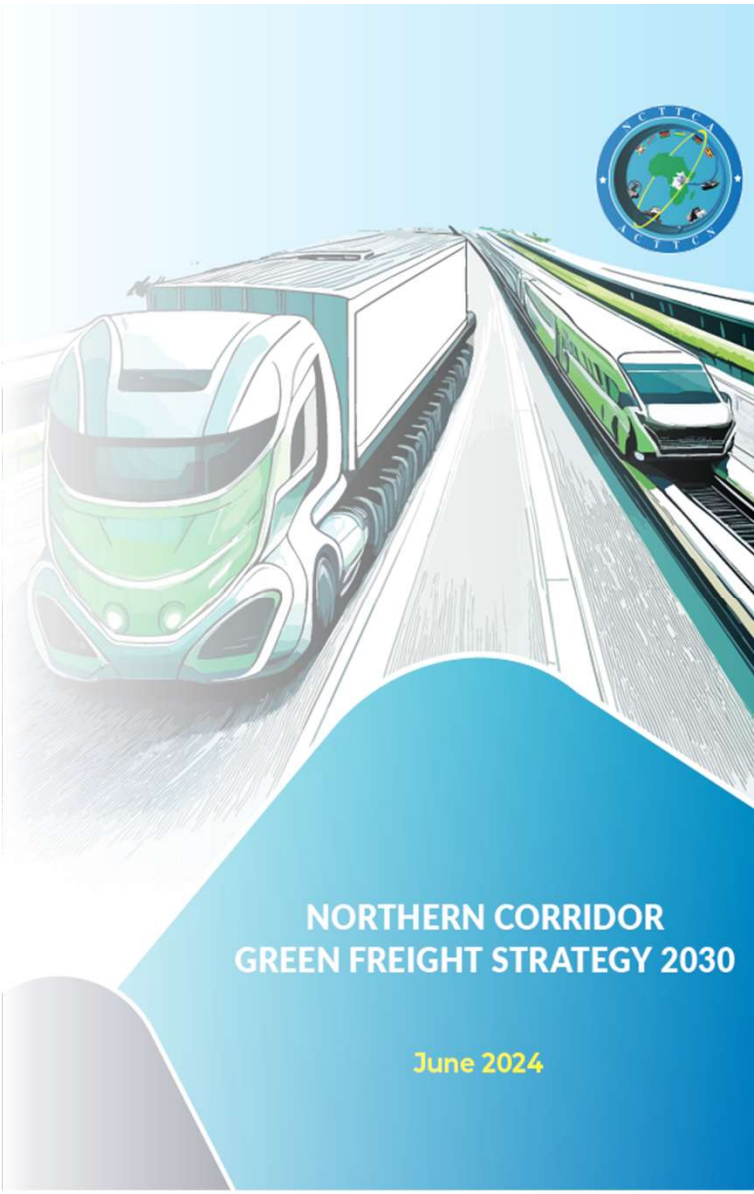
ADB



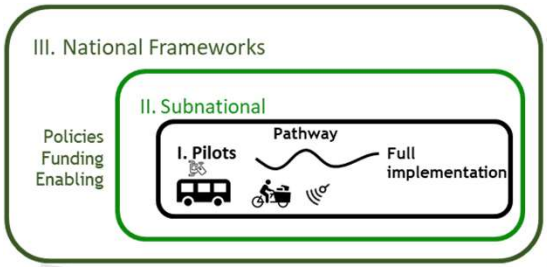
1. Northern Corridor Authority
2. Green Freight Strategy
3. Research capacity
4. Emission accounting framework
5. Fuel and vehicle standards
6. E-truck pilot
7. Scale-up concepts

Replicate

Programmatise

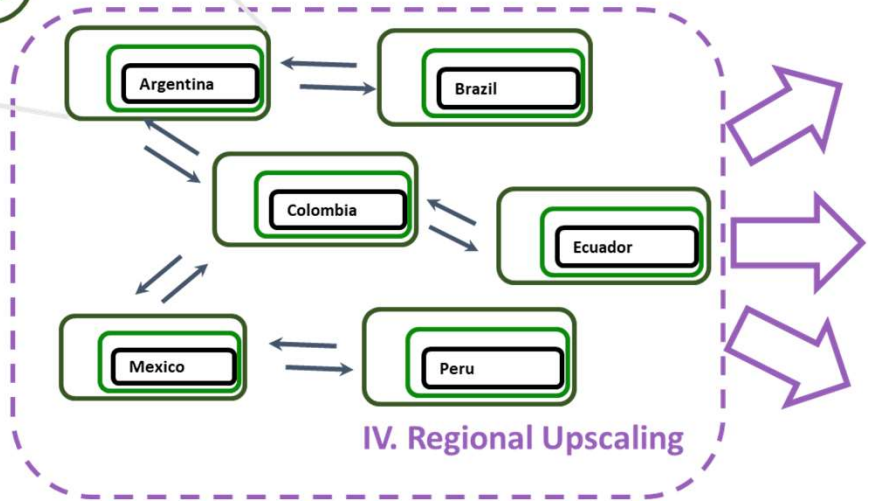






ACCESS

ACCELERATING ACCESS TO LOW CARBON URBAN MOBILITY SOLUTIONS THROUGH DIGITALIZATION



Last-mile

IKI INTERNATIONAL CLIMATE INITIATIVE

HDV

Proposal for co-finance



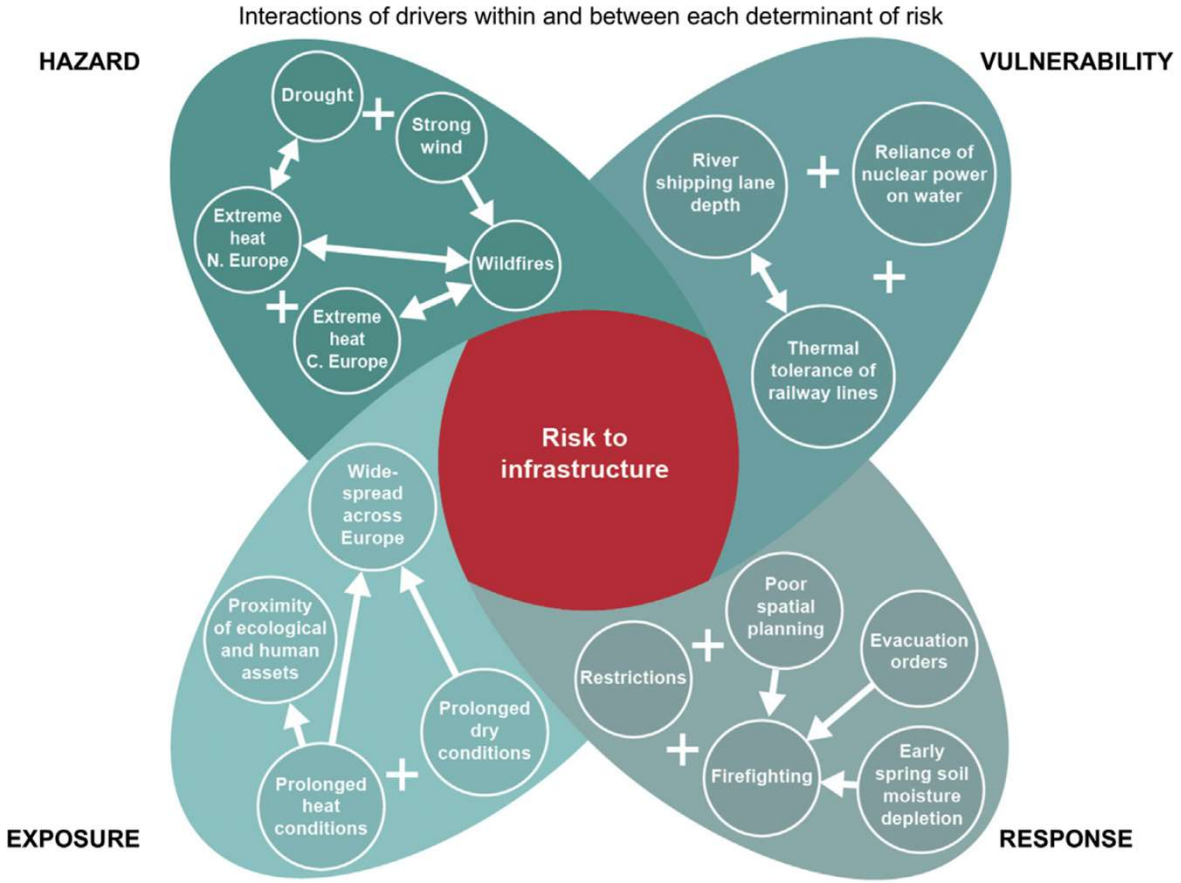
Global Green Road Corridors Initiative



CALSTART
GLOBAL COMMERCIAL VEHICLE DRIVE TO ZERO
ELECTRIC VEHICLES INITIATIVE
AN INITIATIVE OF THE CLEAN ENERGY MINISTERIAL
icct THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION
International Transport Forum
Government of the Netherlands
Smart Freight Centre
Department for Energy Security & Net Zero
UN environment programme
U.S. DEPARTMENT OF ENERGY
THE WORLD BANK
WBCSD World Business Council for Sustainable Development



Network resilience and complex risk



Simpson et al 2021

Exports of Used EVs and battery EoL

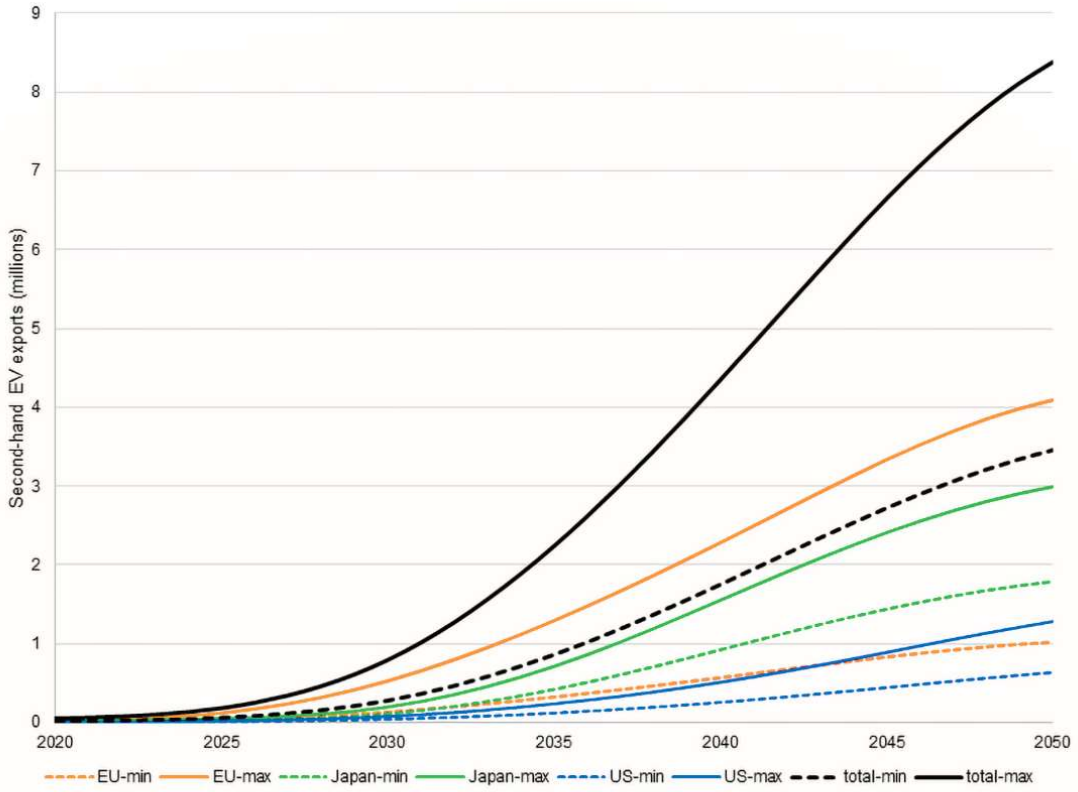
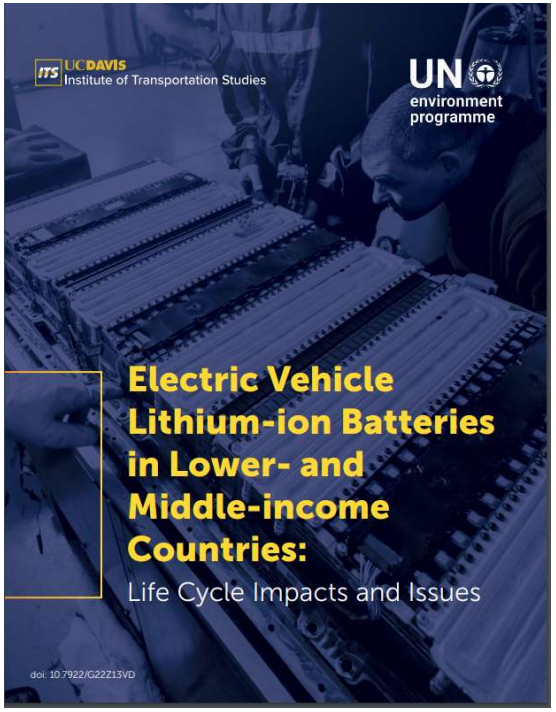


Figure 4. Maximum and minimum estimates of second-hand EV exports from the three top global used vehicle exporters (EU, Japan, and US).



https://www.unep.org/resources/report/electric-vehicle-lithium-ion-batteries-lower-and-middle-income-countries



In partnership and cooperation with



Thank you!



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