

New but Used

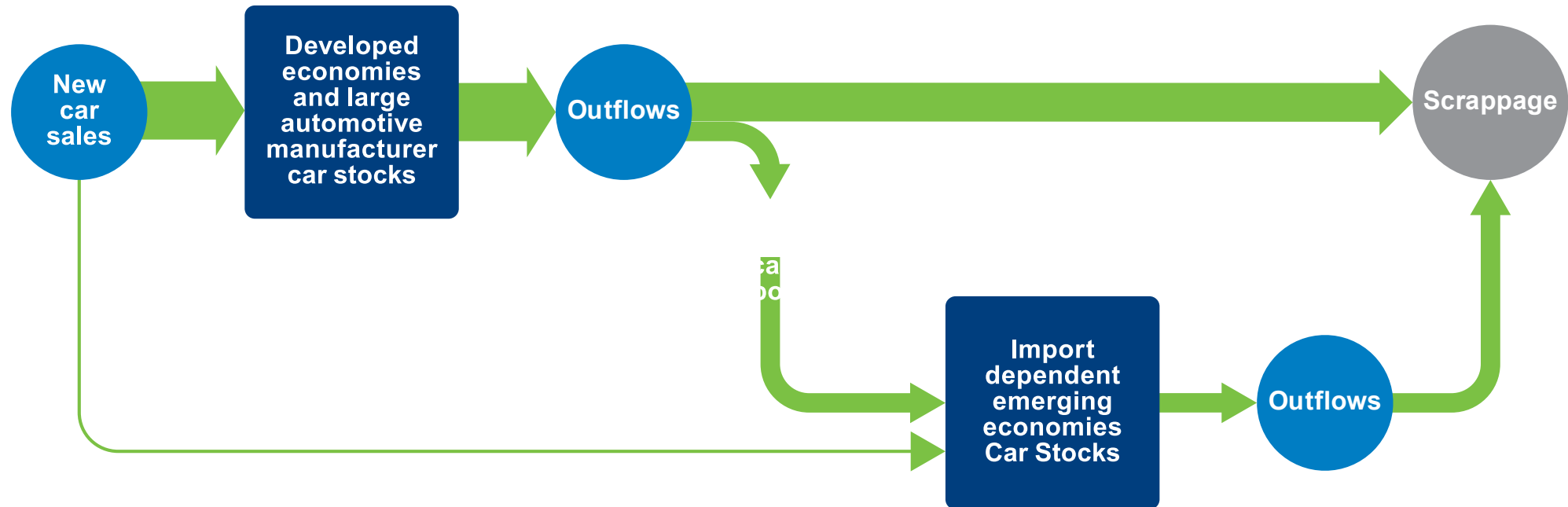
**The Electric Vehicle Transition and the
Global Second-hand Car Trade**

10th ITF TRANSPORT STATISTICS MEETING
11–12 April 2024

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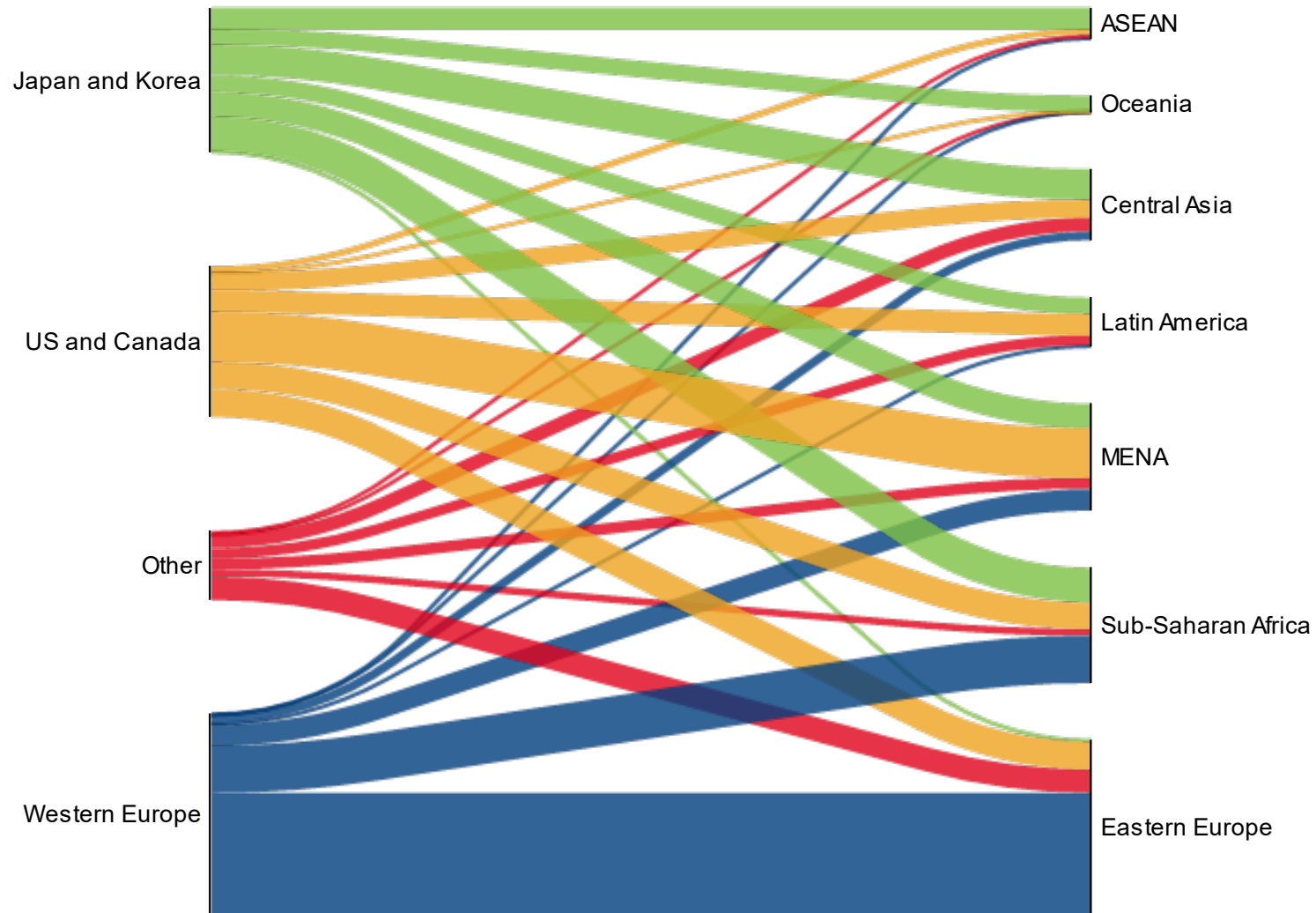


The global flows of vehicles



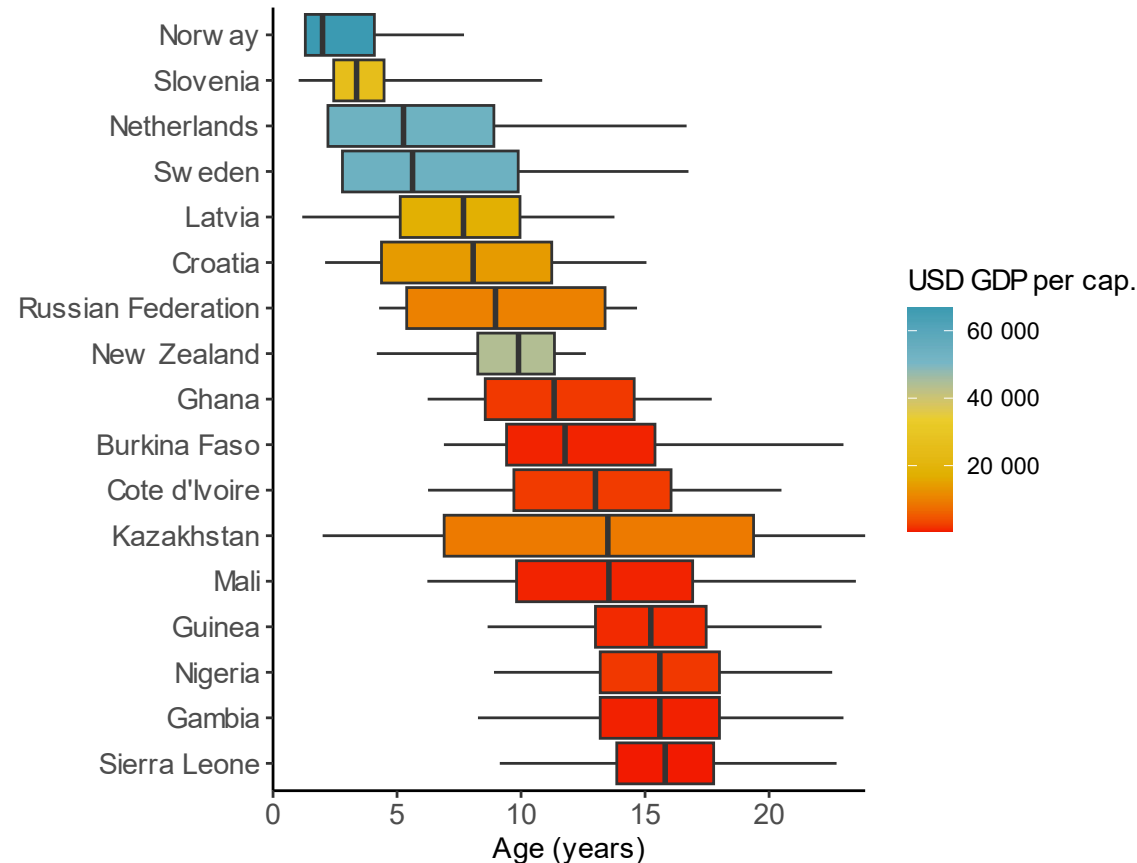
Key point: One quarter of the world's population lives in a country where over half of the cars are used imports.

Mapping used vehicle exports



Emerging economies get the bottom of the barrel

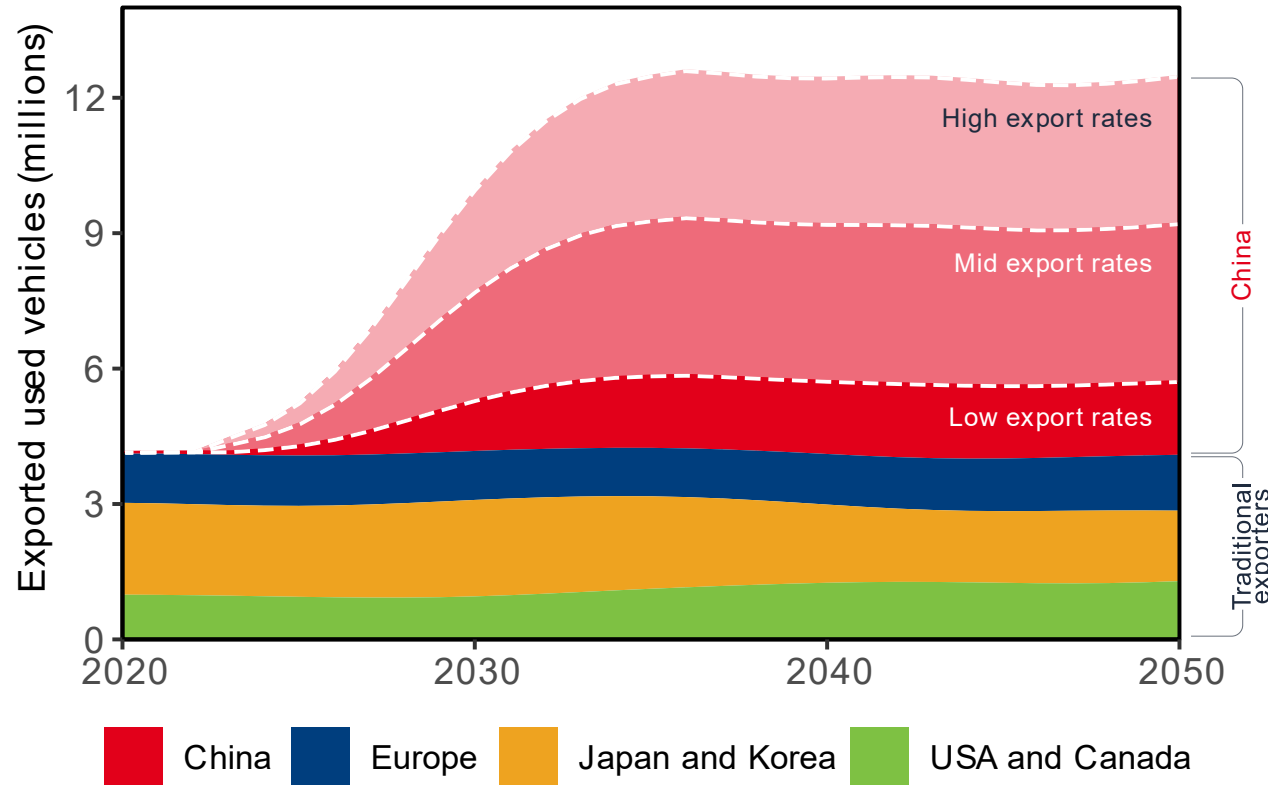
Vehicle imports by age



Key point: Vehicles imports into emerging economies are old and often not roadworthy, producing severe air pollution and safety risks.

The rapid ascent of China

China will play a significant role in the future



Key policies in China:

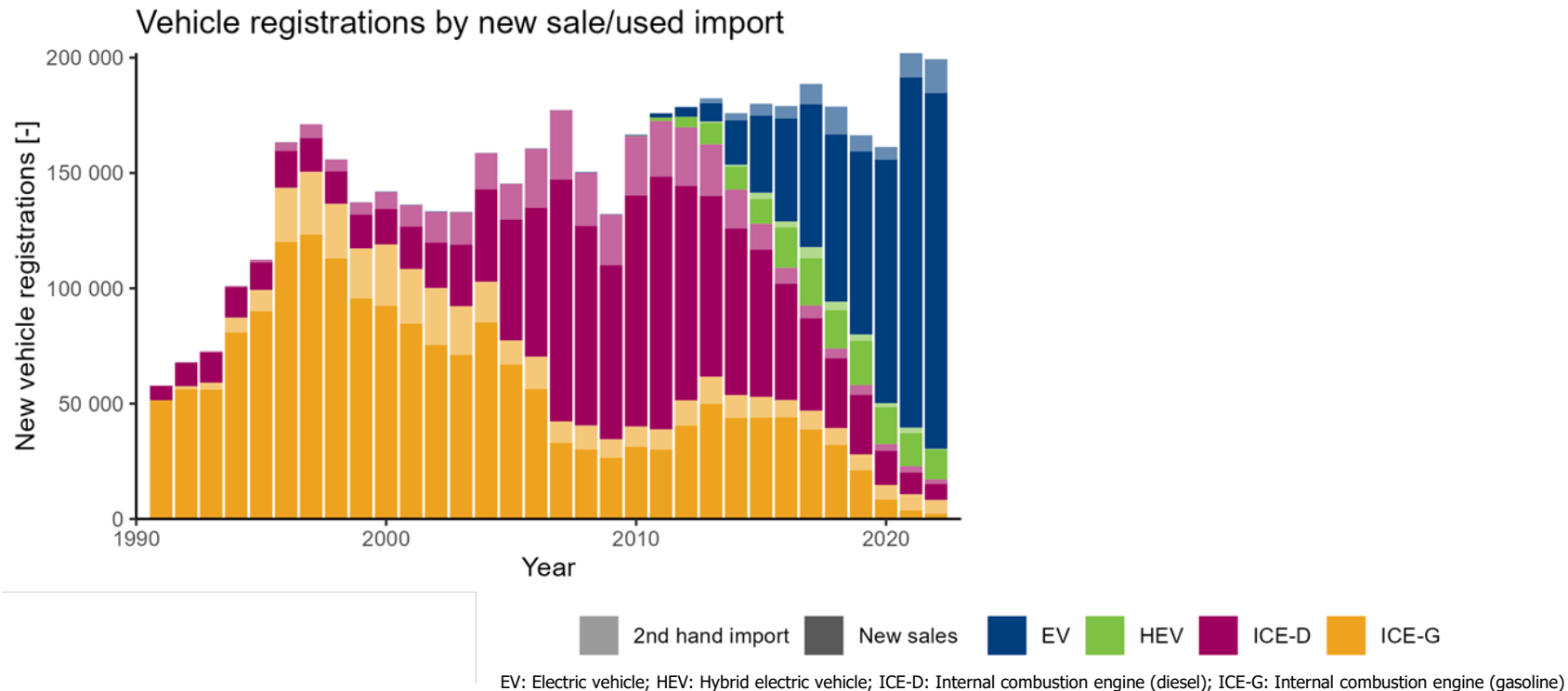
- Export ban until 2019
- Fleet electrification results in surplus of ICEV
- Proactive support of used vehicles export

Key point: Exports from China could equal the rest of the OECD combined in less than a decade

The electric vehicle transition

The dumping begins...

Vehicle registrations and exports from Norway



Key points:

- ICE vehicle exports (especially diesel) **above historical rates** with increasing EV adoption.
- Risk of **flooding** emerging economies with **unwanted ICE** cars if business-as-usual continues.

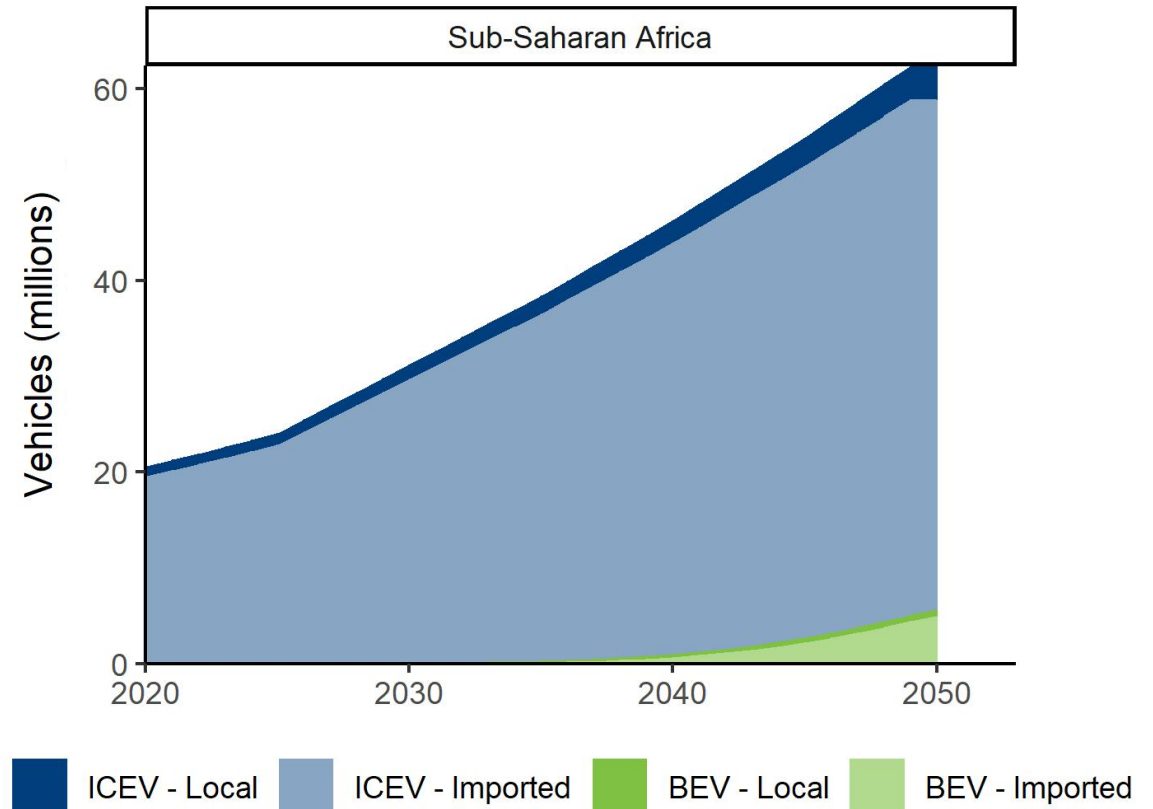
Emerging economies may see little EV adoption

Passenger car stocks by powertrain and origin

EVs could be **exported less** than ICEV:

- Potential oversupply of conventional cars
- Lack of charging infrastructure and demand
- Alternative uses for batteries (recycling + 2nd life applications)
- Unwillingness to export critical materials
- ...but more is possible

Key points: Avoid hampering exports of EVs



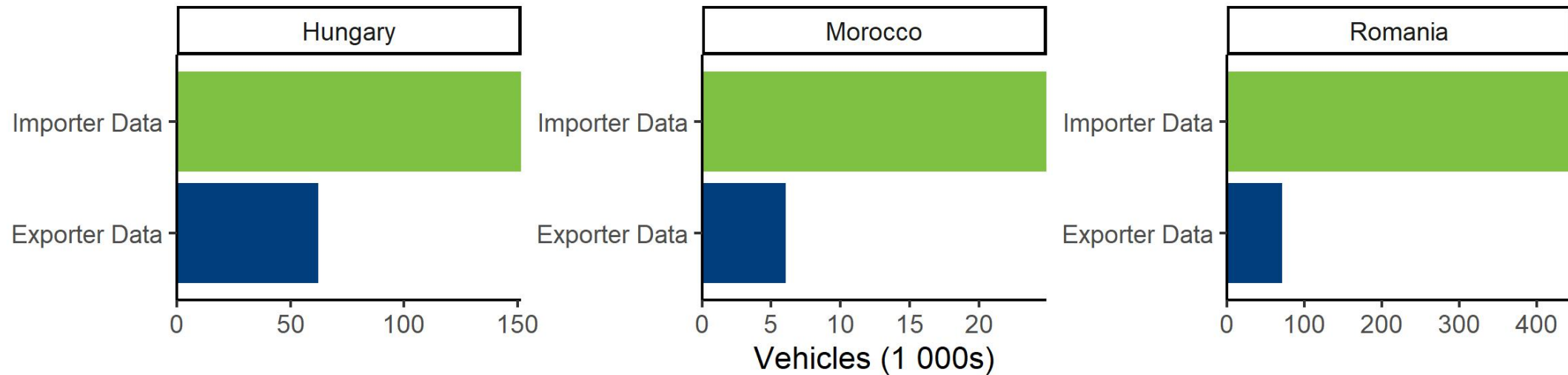
Vehicle stock in SSA assuming EV export probability 5 times lower than ICEV.

Policy Recommendations

- **Ensure that used cars for export meet roadworthiness criteria, including emissions performance**
- **Track the trade: improve the traceability of used vehicles**
- **Avoid hampering exports of used electric vehicles to emerging economies**

Track the trade: Used vehicle exports are under-reported

Vehicle imports: importer country statistics vs the total of exporter country statistics

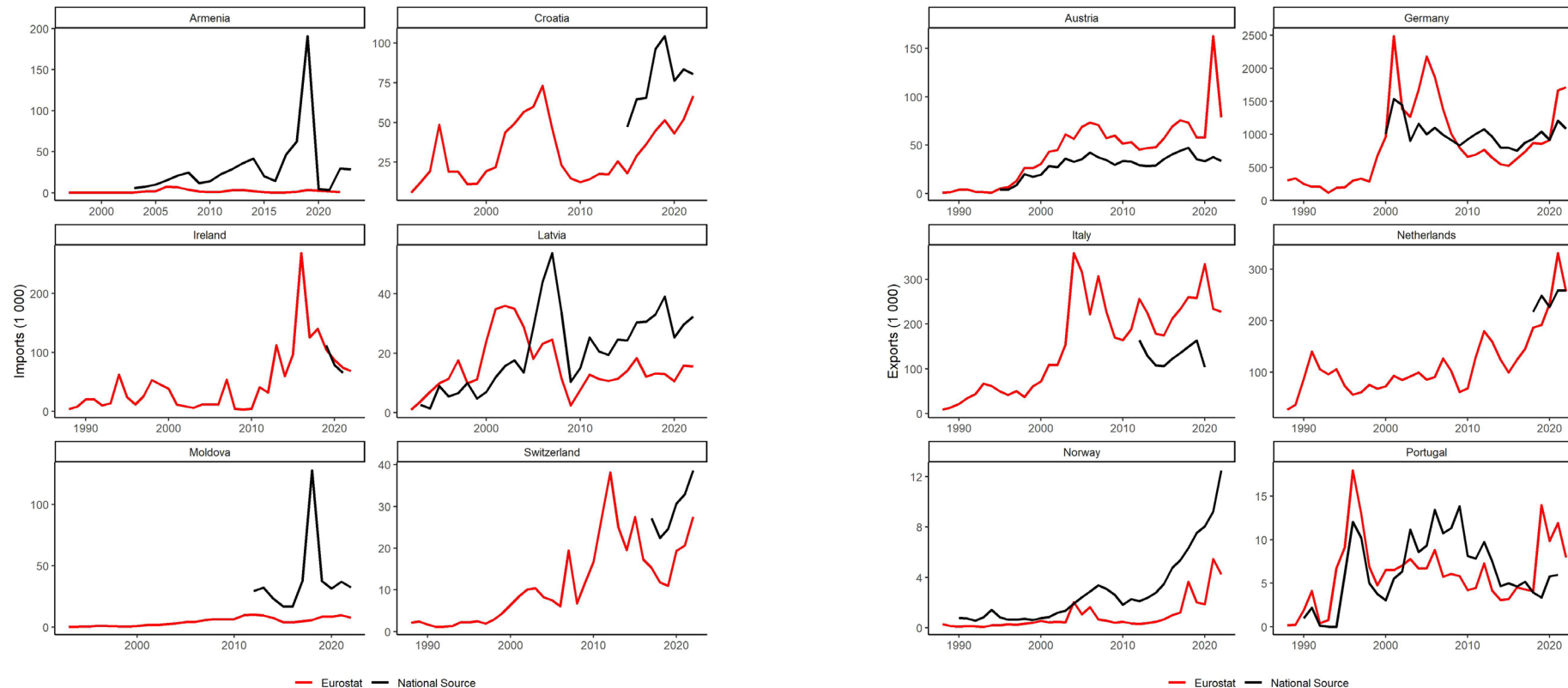


Key points:

- Export data are systematically under-reported. Better traceability is needed.
- Digital trade databases are needed with better enforcement.

Track the trade: Used vehicle exports are under-reported

Vehicle trade: National Statistics vs Eurostat



Key point:

- There is a significant mismatch between the National Statistics and Eurostat database for both, import and export data

Publicly available data

We will be making all the data we have collected available from 2015 to 2024 (May). The database includes information from

Armenia	Japan
Austria	Latvia
Brazil	Morocco
Canada	Netherlands
Croatia	New Zealand
Czech Republic	Norway
Estonia	Portugal
Korea	Romania
Eurostat	Slovakia
Finland	Sweden
Hungary	Switzerland
Italy	United Kingdom
Ireland	United States



the ITF summit

Discussion

- Differences between national statistics:
 - Does the methodology vary in collecting data for different data sets?
 - What are the main possible reasons for used vehicle exports being under-reported? What are possible solutions?
 - EU MOVE-HUB

As part of the end-of-life vehicles directive (ELV) the European Commission aims to record specific details about each vehicle in a “vehicle passport” to be included in custom declarations through a centralised digital portal known as MOVE-HUB.

- **European Car and Driving Licence Information System, EUCARIS.**

EUCARIS is a collaborative initiative involving multiple European countries governed by a multilateral treaty. Its primary purpose is to enable data exchange to track vehicles between participating countries better to avoid illegal trade of vehicles (e.g. stolen vehicles). Notably, EUCARIS operates without a central European database, with each participating country maintaining its own vehicle and driving license records, thereby reducing the cost and administrative burden. However, the system is not currently available for non-EU used vehicle importer countries

THANK YOU!

Questions?

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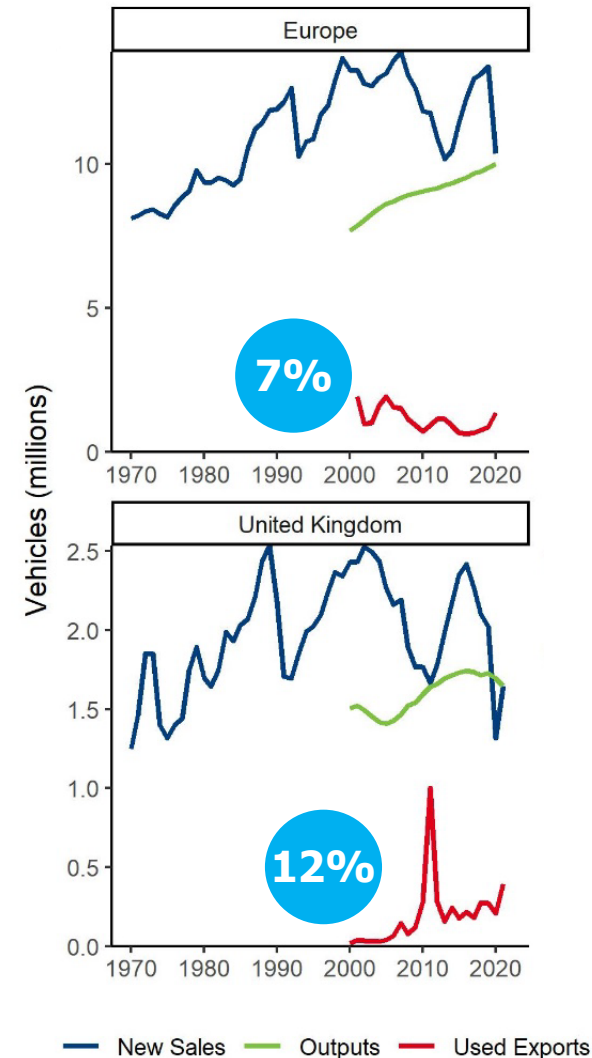
New cars in, old cars out

Vehicle flows in selected markets

- **New sales:** new vehicles entering the stocks
- **Outputs:** scrapped vehicles + exports
- **Used exports:** 2nd life in emerging economies

Key points:

- Vehicle outputs follow new sales with a delay of ~10–15 years later
- Used exports account for up to 36% of outputs
- Outputs from China ramping up now



Where will used EVs will end up ?

Key point: EV export probability depends on

- Demand of EVs in emerging economies
- Raw material prices for critical minerals
- TRL of recycling/re-use applications
- Economic viability of secondary applications
- ...

