

ODYSSEE-MURE

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Focus on data collection and indicators for the transport sector

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Data availability on transport



Data availability - road consumption by type of vehicle



Most of countries are able to disaggregate road consumption by type of vehicle:

Cars: 100%

Motorcycles: 90%

- Buses: 100% (except Lithuania: no disaggregation between buses and trucks)
- Trucks and light vehicles: 100% but 30% of countries are not able to provide the disaggregation between trucks and light vehicles
- For a few countries, the disaggregation is not available for all years → estimation made with the help of Enerdata for the missing years based on the unit consumption per car equivalent
- Data by fuel:

Enerdata

- 100% for diesel and gasoline
- Very good for biofuel
- Low data availability for electricity consumption

If data is 0 or negligible, put 0! Empty cell = datanot available

Data availability – traffics



- Traffics of passengers and freight (pkm and tkm) are now taken from **DGMOVE**
- For international air traffic (in passengers): 100%
- For non-motorised modes, very low data availability (10%)



Data availability – specific consumption of vehicles (I/100km)

- Specific consumption of new cars and vans is now calculated by Enerdata from EEA based on specific CO2 emissions (gCO2/km)
- For vehicles stock, data availability on specific consumption is low (except for cars) and the data is not always updated in recent years.

Cars: 70%

Motorcycles: 40%

Buses: 15%

Light duty vehicles: 40%

Trucks: 50%



Sales of cars and vans are now collected by Enerdata from EEA data base

Total sales:

Motorcycles: 90%

Buses: 90%

Trucks: 90%

- Sales by fuel: lower data availability
 - 60% for thermal buses and 40% for trucks
 - New technologies mainly available in recent years and 50-70% countries missing (the situation is better for electric vehicles)



If data is 0 or negligible, put 0! Empty cell = datanot available



Data availability – stocks of vehicles



Total stocks:

Cars: 100%

Motorcycles: 100%

Buses: 100%

Light duty vehicles and trucks: 95% but the remaining countries are able to provide the total combining both

Stocks by fuel:

 Data availability of thermal vehicles: 100% for cars but lower for other vehicles (90% for buses, 80% for trucks and light vehicles)

Good data availability for electric vehicles but lower for hybrid

(and bad for other fuels)

If data is 0 or negligeable, put 0! Empty cell = datanot available



Data availability – average annual distance

- Not used properly in the analysis of EE but useful to monitor the behavioural changes and calculate indicators in toe/km
- Rather good data availability for cars but lower for heavy vehicles
- Cars:
 - 90% of data availability for the average
 - 75% for gasoline / diesel
- Motorcycles: 60%
- Buses: 80%
- Light duty vehicles: 60%
- Trucks: 60%



Main data issues



Main data issues

2 main issues* encountered when checking NTs data series on transport sector in the past years:





Data consistency $(\sim 50\% \text{ of data issues})$ Lack of data (~20%)

*Other data issues: scope of data, difference with other source, estimation



Main data consistency issues*

- Recurrent data consistency issues:
 - Total road consumption VS road consumption by type of vehicle
 - Total stock of vehicles VS stock of vehicles by fuel
 - Strange trend in vehicles stock and average distance travelled sometines linked to change in method / source

By type of problem	%
Strange variation	38%
Inconsistency (sum/tot or sales/stock)	27%
Change in method or source	12%
Data series revision	12%
Data collection errors (negative data, replication, error)	10%

By type of data	Total	Not fixed	Fixed
Stock	18	10	8
Consumption by type			
of vehicle	14	7	7
Annual average distance	7	4	3
Sales	5	3	2
Unit consumption	5	3	2



*If we consider only the data still collected by the NTs

Lack of data issues*

- [See previous part on data availability]
- Mainly issues related to the last years or only a few years
- Recurrent missing data:
 - Stock and sales of vehicles by fuel (especially for other) vehicles than cars)
 - Specific consumption of vehicles stock sometimes difficult to update data as it is coming from surveys or estimates

By type of data	%
Stock	28%
Specific consumption	28%
Sales	24%
Annual average distance	16%
Consumption by type of vehicle	4%



Improvements



Suggestions of new data to collect

- Data on "light" mobility (cycling, foot...): traffics
- Number of charging stations for EVs, (number of GNV/bio-**GNV** stations)
- Data on infrastructures (km of cycle tracks...)
- Vehicles characteristics (weight, size)
- How to take into account the electricity consumption of EVs, whatever the place of charging?



Small groups of discussion



Objectives and format



General question: How can we improve energy efficiency monitoring of the transport sector?



40 minutes of exchanges in small groups

Each group (7-10 persons) addresses 1 specific question (see next slide) → investigate the topics that interest you!



Output expected: ideas / actions / recommendations / guidelines



Specific questions

How can we improve energy efficiency monitoring of the transport sector?

- Best practices on estimation of transport data (specific consumption of vehicles...)
- New needs of transport data to monitor EE trends (EVs, H2, cycling, electricity consumption of Evs, telework...)
- How to recognize sufficiency policies in transport?
- 4. Good practices on evaluation of transport policies
- 5. Sufficiency indicators for transport
- Missing indicators / analysis / tools to evaluate EE policies on transport



Oral report



Each group chooses:

- a volunteer responsible for the report,
- a "facilitator".



Brief oral report by a representative from each group - 3 minutes / group



<u>Written feedback</u> – possibility to add comments/questions with post-its on the paperboards later (at the end of the day or during the break next day)



Rules for an efficient and fruitful exchange



Listen carefully



Speak with intent



Be caring



Trust each other



Respect the framework



Respect the time frame



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About Enerdata:

Enerdata is an energy intelligence and consulting company established in 1991. Our experts will help you tackle key energy and climate issues and make sound strategic and business decisions. We provide research, solutions, consulting and training to key energy players worldwide.

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