International Energy Agency

Focus on sectoral energy data : Transport

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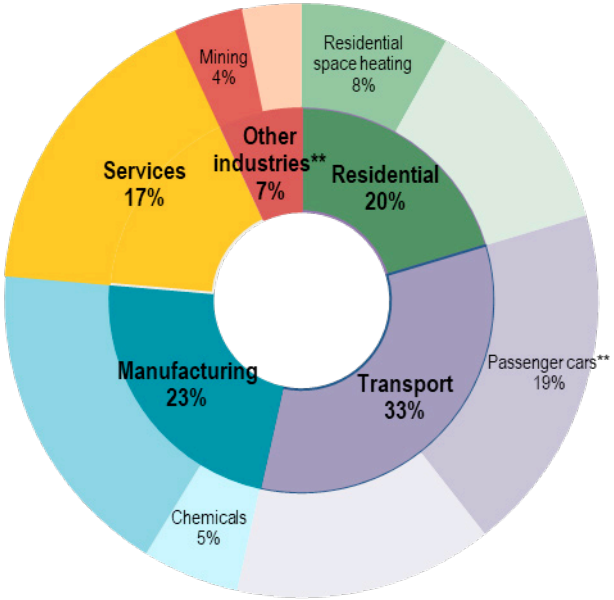
Why transport energy data ?

Largest CO2 emitting end uses by sector of IEA*



- The **transport sector** accounted for the **highest share of final energy consumption** in IEA countries.
- Passenger cars alone use more energy than the whole residential sector and together with freight road vehicles they accounted for almost a third of final energy related CO2 emissions.

*The IEA aggregate refers to the twenty four IEA member countries for which energy efficiency data covering most of the end uses area available: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, Slovak Republic, Spain, Switzerland, the United Kingdom and the United States. The shares are for the year 2018.
**Other industries includes agriculture, mining and construction; passenger cars includes cars, sport utility vehicles and personal trucks.

TABLE 1.A(a) s3 SECTORAL BACKGROUND DATA FOR ENERGY

GREENHOUSE GAS SOURCE AND SINK CATEGORIES
1.A.3 Transport
a. Domestic aviation[10]
b. Road transportation[11]
i. Cars
ii. Light duty trucks
iii. Heavy duty trucks and buses
iv. Motorcycles
v. Other (please specify)
c. Railways
d. Domestic Navigation[10]
e. Other transportation *(please specify)*
i. Pipeline transport
ii. Other *(please specify)*
Off-Road Vehicles

a.

b.

c.

d.

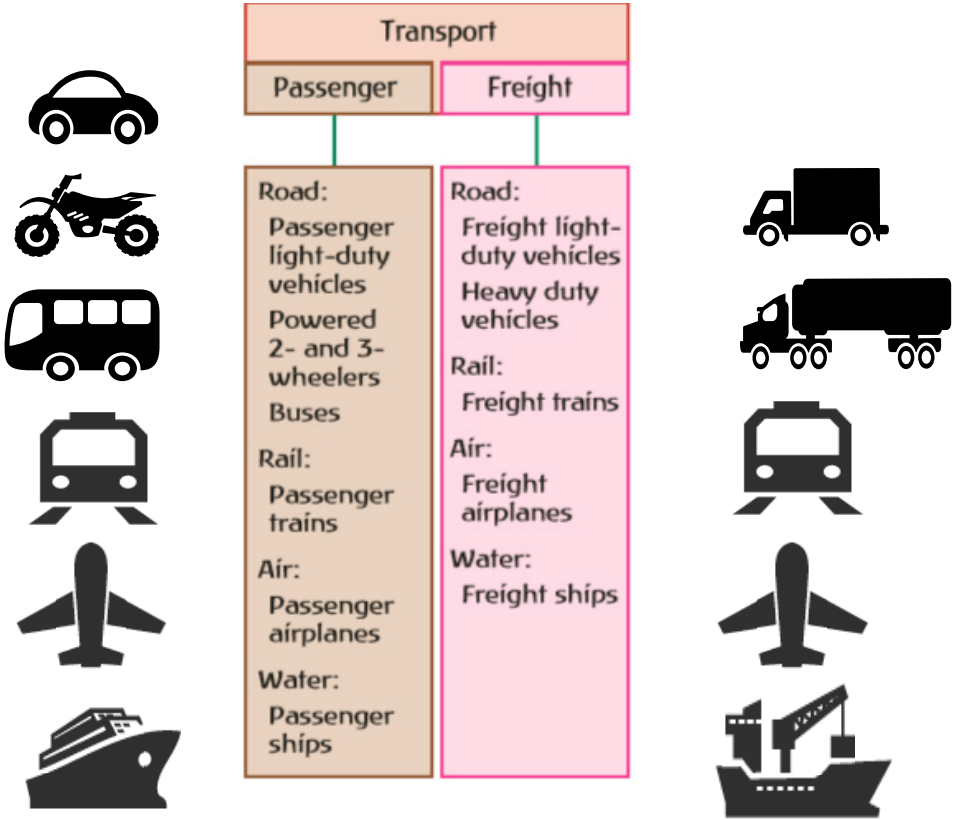
e.

Detailed data for the transport sector is key

The energy balance: A focus on the transport sector

TFC	634976	536	534864	153259	-	-	34269	79591	516837	103332	2057666
INDUSTRY	**494644**	**536**	**44922**	**65423**	**-**	**-**	**482**	**-**	**320327**	**69351**	**995685**
Iron and steel	186264	-	839	5502	-	-	-	-	48865	5022	246492
Chemical and petrochemical	83454	-	16256	16975	-	-	-	-	54911	36711	208308
Non-ferrous metals	15047	-	715	4602	-	-	-	-	55755	4716	80834
Non-metallic minerals	135021	-	5627	9462	-	-	-	-	30695	345	181150
Transport equipment	1828	-	625	4054	-	-	-	-	9844	1140	17491
Machinery	7100	-	1343	7561	-	-	-	-	43072	956	60032
Mining and quarrying	4443	-	2226	1380	-	-	-	-	9919	951	18918
Food and tobacco	18412	-	637	4261	-	-	-	-	11033	4216	38560
Paper, pulp and printing	6254	-	291	2022	-	-	-	-	7743	5460	21770
Wood and wood products	1025	-	176	379	-	-	-	-	3194	246	5019
Construction	3689	-	6781	175	-	-	-	-	7330	273	18249
Textile and leather	5590	-	432	3458	-	-	-	-	19020	8546	37046
Non-specified	26518	536	8977	5591	-	-	482	-	18945	768	61817
TRANSPORT	2	-	287862	22269	-	-	-	2306	12162	-	324601
Domestic aviation	-	-	23916	-	-	-	-	-	-	-	23916
Road	-	-	233338	21820	-	-	-	2306	4850	-	262314
Rail	-	-	3215	-	-	-	-	-	7312	-	10528
Pipeline transport	-	-	1	449	-	-	-	-	-	-	450
Domestic navigation	-	-	25288	-	-	-	-	-	-	-	25288
Non-specified	2	-	2104	-	-	-	-	-	-	-	2105
OTHER	95017	-	79045	55413	-	-	33787	77286	184349	33981	558877
Residential	45329	-	43875	40968	-	-	26626	77286	84251	27042	345376
Comm. and public services	17122	-	16287	14333	-	-	5606	-	35905	2806	92060
Agriculture/forestry	13790	-	18884	111	-	-	1472	-	10914	34	45204
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	18776	-	-	-	-	-	82	-	53279	4100	76237
NON-ENERGY USE	45314	-	123035	10154	-	-	-	-	-	-	178503
in industry/transf./energy	45314	-	90701	10154	-	-	-	-	-	-	146169
of which: feedstocks	-	-	75604	10154	-	-	-	-	-	-	85758
in transport	-	-	2114	-	-	-	-	-	-	-	2114
in other	-	-	30220	-	-	-	-	-	-	-	30220

Energy data for the transport sector – IEA approach



Data sources – types of data collection

For the transport sector

Surveys

Cars manufactures,
Households, mobility vehicle surveys
Gas stations

Administrative data

Transport Ministries, Vehicle registers
Manufacturers and international organisations (ITF, IATA, UIC, IRF…)
Roadworthiness testing services

Direct measurements

Odometer readings

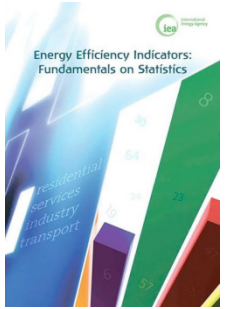
Estimation/modelling

e.g. Sales, stocks, fuel economy, mileage, age estimate -> Energy consumption, pkm, tkm

IEA resources : methodologies on indicators

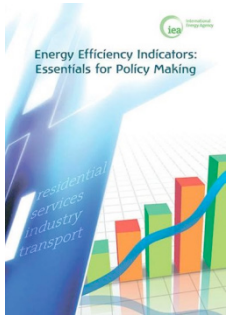
➢**Fundamentals on statistics:**
to provide guidance on how to collect the data needed for indicators

- Includes a compilation of existing practices from across the world
- https://www.iea.org/reports/energy-efficiency-indicators-fundamentals-on-statistics



➢**Essentials for policy makers:**

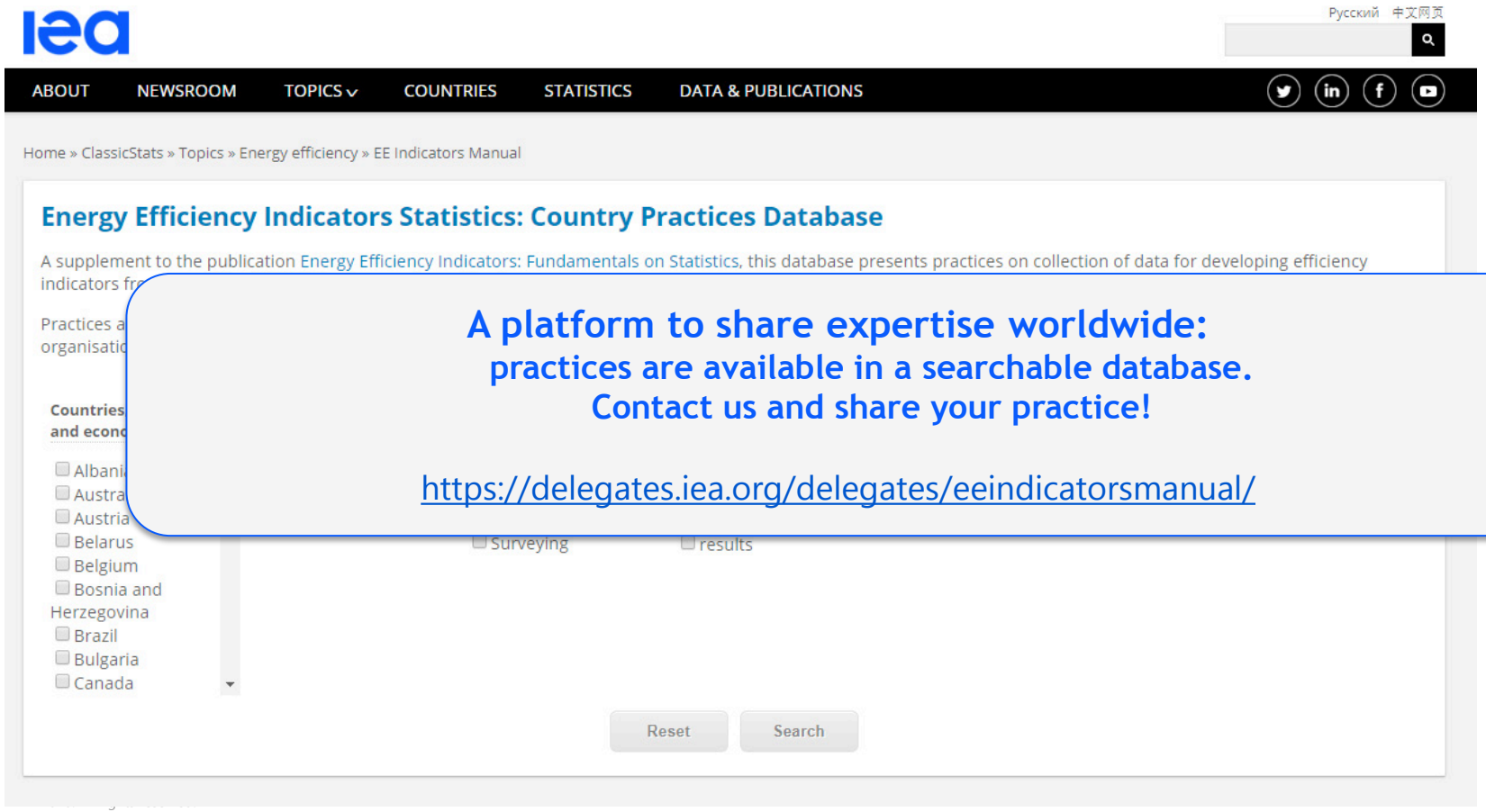
- To provide guidance to develop and interpret indicators
- https://webstore.iea.org/energy-efficiency-indicators-essentials-for-policy-making



Both available also in:
Spanish
Russian
Chinese
French (New!)

International guidelines are key to ensure comparability of data and indicators across countries

Country practices database



A platform to share expertise worldwide:
practices are available in a searchable database.
Contact us and share your practice!

https://delegates.iea.org/delegates/eeindicatorsmanual/

Questions?

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