



# **CIVITAS** indicators

Citizens' awareness of mobility impacts on sustainability (SOC\_AW\_CK)

# **DOMAIN**



**Transport** 



Environment



Energy



Society



Economy

**TOPIC** 

**Awareness** 

**IMPACT** 

Awareness of transport impacts

Improving the consciousness of transport effects

SOC\_AW

# **Category**

Key indicator	Supplementary indicator	State indicator
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# **CONTEXT AND RELEVANCE**

Mobility of individuals and transport of goods play a large role in modern society and economy. The everyday life of people implies frequent movements to reach locations where specific activities can be carried out. Transporting materials and products is an essential component of production and distribution chains. While mobility and transport provide very useful services to the society and the economic activities, they deliver adverse effects, like pollution, noise, accidents, and their related consequences on human health and well-being. A correct understanding of positive and negative aspect of transport and mobility is a condition to design and implement effective policy measures. The more widespread is the knowledge about the implications of transport activity on sustainability the more support to policy action can be expected.

This indicator provides a measure of the awareness of citizens about the impact of the transport activity on the sustainability. It is a relevant indicator when the policy action is aimed at increasing the consciousness of the individuals regarding the consequences of individual's mobility choices and regarding the context in which these choices are made. A successful action is reflected in a <u>HIGHER</u> value of the indicator.

#### **DESCRIPTION**

This indicator is a **dimensionless index** representing a summary of the share of citizens demonstrating knowledge of a set of observed facts regarding the impact of transport of sustainability.

# METHOD OF CALCULATION AND INPUTS

The indicator is calculated as the average of the shares of citizens who provided correct responses to a set of questions about the effects of transport on sustainability. **The indicator should be calculated exogenously** based on the specified inputs and its value should be coded in the supporting tool.

The responses to the questions should be collected by means of a sample survey.

# Method Calculation of the indicator based on responses Significance: 0.50 collected by means of a sample survey **INPUTS** The following information is needed to compute the indicator: a) $ShQst_1$ . Share of inhabitants providing the correct answer to question 1: In the EU, what is the share of CO2 emissions due to transport activity? Less than 10% i) ii) Between 10% and 20% Between 20% and 30% iii) Between 30% and 50% iv) More than 50% V)

Correct answer: iii) [https://energy.ec.europa.eu/data-and-analysis/eu-energy-statistical-pocketbook-and-country-datasheets en]

- b)  $ShQst_2$ . Share of inhabitants providing the correct answer to question 2: In the EU, between 1990 and 2021, how CO2 emissions due to transport activity have developed?
  - i) CO2 transport emissions have decreased while CO2 total emissions have increased
  - ii) CO2 transport emissions have decreased faster than CO2 total emissions
  - iii) CO2 transport emissions have decreased as fast as CO2 total emissions
  - iv) CO2 transport emissions have decreased slower than CO2 total emissions
  - v) CO2 transport emissions have increased while CO2 total emissions have decreased

Correct answer: v) [https://energy.ec.europa.eu/data-and-analysis/eu-energy-statistical-pocketbook-and-country-datasheets\_en]

- c) ShQst<sub>3</sub>. Share of inhabitants providing the correct answer to question 3: In the EU, how PM transport emissions compare against PM emissions from households and commercial activities?
  - i) PM Transport emissions are less than 20% of PM emissions from households and commercial activities
  - ii) PM Transport emissions are less than 50% of PM emissions from households and commercial activities
  - iii) PM Transport emissions are broadly as many as PM emissions from households and commercial activities
  - iv) PM Transport emissions are more than PM emissions from households and commercial activities
  - v) PM Transport emissions are many more than PM emissions from households and commercial activities

Correct answer: ii) [https://www.eea.europa.eu/data-and-maps/daviz/sector-split-of-emissions-of-4/#tab-chart 1]

- d) ShQst<sub>4</sub>. Share of inhabitants providing the correct answer to question 4: In the EU, how many people were killed in road accidents in 2023?
  - i) About 2 000
  - ii) About 5 000
  - iii) About 10 000
  - iv) About 20 000
  - v) About 40 000

Correct answer: iv) [https://ec.europa.eu/eurostat/statistics-explained/index.php?oldid=630784]

- e)  $ShQst_5$ . Share of inhabitants providing the correct answer to question 5 In the EU, how many people died prematurely due to air pollution (particulate matter PM2.5 and nitrogen dioxide NO2) in 2022?
  - i) About 50 000

- ii) About 150 000
- iii) About 300 000
- iv) About 450 000
- v) About 600 000

Correct answer: iii) [https://www.eea.europa.eu/en/europe-environment-2025/thematic-briefings/environment-and-human-health/air-pollution-and-impacts-on-human-health]

The experiment would be reflected in the indicator in terms of changes of these shares.

# METHOD OF CALCULATION

The indicator is computed according to the following steps:

- Organising a sample survey to collect data. The sample survey can be organised to collect more information than the one needed for this indicator. See the dedicated "Sample surveys guidelines" for methodological indications.
- Analyse survey results to measure the share of correct answers to each question.
- Estimation of the indicator. (see equation below)

### **EQUATIONS**

The indicator should be computed using the following equation:

$$AwCtzShr = \frac{\sum_{1}^{5} ShQst_{i}}{5}$$