B-EMI6

WASTEWATER PRODUCTION IN THE BUILDING

Number	B-EMI6
Indicator name	Wastewater production in the building
Area	M
Indicator definition	The total amount of wastewater produced in the building. If the building is connected to a sewerage system, the wastewater is discharged to a central wastewater treatment plant. The second option is a local wastewater solution treatment (septic tank, domestic wastewater treatment plant, root waste treatment plant, etc.) for those buildings that are not connected to the centralized sewage system. The volume of wastewater is then converted to the corresponding greenhouse gas emissions.
Indicator unit	kg CO2e/obyv.
Key words	Wastewater, wastewater treatment
Reason for tracking and usability	The production of waste, including wastewater, represents a considerable source of GHG emissions (e.g. in average 3 – 10% of the GHG total emissions in the cities of the Czech Republic and Slovakia). The production of wastewater is a significant source of greenhouse gas emissions due to the content of organic substances and the need for their subsequent disposal From the point of view of environmental protection, a better solution for the wastewater treatment is the construction of a central sewerage system (where the wastewater is separated from the rainwater) and wastewater treatment in the WWTP. Another option is to build a root treatment plant. The least suitable solution is a drain to a septic tank or the home treatment plant).
Completeness, representativeness, validity	The indicator is sufficiently representative if data about wastewater produced in the building are available. The source of data can be billing for sewerage. Validity may be reduced if such bill is not available. Further complication is, if the building is not connected to the sewer and an individual treatment plant or septic tank is used. The exact data on the annual production of wastewater must then be derived from the volume of the septic tank or water consumption.

Description of data processing	In the case of buildings connected to the sewerage system with the final WWTP, it is necessary to obtain an annual bill of water and waste water. The amount of waste water in m3 / year is needed for the evaluation through this indicator. This amount is then converted to greenhouse gas emissions according to the relevant emission factor. In the case of buildings not connected to the sewerage system, the number of inhabitants in the building is used to calculate emissions. The standardized value of emissions from wastewater production per inhabitant of the building is used.
Data source	The primary source of data is the building operator or the company responsible for water supply and sewerage in the city.
Tracking frequency	Once a year
Urban influence	The city and the organizations it manages can partially influence the production of wastewater in their facilities, e.g. by introducing technologies to save water consumption or by separate collection of rainwater and waste water. They also have an important role in connecting households to sewers with a final wastewater plant WWTP, in areas where wastewater plants have not yet been built. The overall influence of the city on the value of the indicator is only indirect, the biggest role is played by the technologies used in wastewater treatment and the method of sludge management.
Presentation method	The results will be presented in a uniform Klimasken framework on a five-point scale according to specified intervals (kg CO2e / inhabitant)
Responsibility	Owner, building manager