B-GOV3

RAINWATER CAPTURE ON THE BUILDING

Number	B-GOV3
Indicator name	Rainwater capture on the building
Area	G
Indicator definition	The indicator (qualitative and quantitative) describes the elements on the roof of the building and on its vertical structures that have an impact on water retention. The indicator is expressed by the coefficient of blue-green infrastructure, which expresses the scope and quality of the elements of BGI (blue-green infrastructure) around the building.
Indicator unit	coefficient
Key words	Water, rainwater management, water retention, blue-green infrastructure
Reason for tracking and usability	Green roofs and green facades help keep surfaces cooler by evaporation and shading. Greenery and related substrates retain rainwater, intensive roofs about 80%, extensive about 35-70%. Green roofs and facades also have an anti-noise function. The greenery on the building improves the microclimate in its immediate vicinity. Intensive roofs also have a recreational function and both types of roofs increase biodiversity. Green roofs and facades help to connect the building organically with the greenery in the public space. When creating the indicator, a modified "index of blue-green infrastructure" according to J. Vitek (JV PROJEKT VH s.r.o.) and other processed studies and documents in the given area is used. This index expresses the ability of a given type of surface to perform the function of a blue-green infrastructure through the ratio of the functional part of the surface to its total area. For roofs with gravel backfill, which are not considered in the concept of the MZI index, a value of a coefficient of 0.4 is set for the purposes of this indicator. Their ability to retain rainwater is lower than that of vegetation roofs, especially in the case of medium and heavy rainfall.
Completeness, representativeness, validity	The indicator uses a method that has proven itself in practice to calculate the permeability of surfaces in the city and applies it to the building, respectively uses those parts of the BGI that are related to building construction. The indicator is always more representative only in combination with the KLIMASKEN B-AD11 indicator.

Description of data processing	The indicator includes both qualitative (type of surfaces) and quantitative parameters (area). Table of qualitative parameters: (Code; Surface/object description; Definition). - XX; Roof and facade surface without modifications surfaces of roofs and facades without vegetation cover and backfill - D; green wall, climbing plants; climbing plants on facades and structures - E1; extensive roof gardens - flat roof; roof gardens and greenery on underground structures with a height of vegetation substrate up to 200 mm - E2; extensive roof gardens - inclination from 35°; roof gardens and greenery on underground structures with the height of the vegetation substrate up to 200 mm - inclination from 35° - F; intensive roof gardens; roof gardens and greenery on underground structures with the height of the vegetation substrate over 200 mm - Y; so-called blue resp. blue-green roofs; roofs with 100% rainwater retention technology - Z; roofs with gravel backfill roofs; usually covered with gravel fraction 16/32 with a layer thickness of 4 - 6 cm Calculation table with quantitative parameter (area) including example: Example: A building with a floor plan of 10x10 m, a height of 7 m, with a flat roof, covered with an intensive vegetation layer and one wall covered with climbing greenery: Code; Coefficient (k); Area (S) [m2]; Function BGI (fBGI)=k*S - XX: 0; 210; 0 - D: 0,6; 70; 42 - E1: 0,6 0; 0 - E2: 0,3; 0; 0 - F: 0,8; 100; 80 - Y: 1; 0; 0 - Z 0,4; 0; 0 TOTAL: Area TOTAL: 380; Area BGI: 122
Data source	The dimensions of individual types of roof surfaces must be determined by direct field measurements and, if necessary, by comparison with project or construction (execution, technical) documentation.
Tracking frequency	One time, at a change
Urban influence	The city/city district/municipality can directly invest in the modifications of roofs, RWM buildings and other elements of BGI on its own buildings, or support these measures on the buildings of other owners financially or otherwise.

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Presentation method	The results will be presented in a uniform KLIMASKEN framework on a five-point scale after including the final value of the weighted BGI in the appropriate interval. 5(E): 0; 4(D): > 0 < = 0,1; 3(C): > 0,1 < = 0,3; 2(B): > 0,3 < = 0,5; 1(A): > 0,5
Responsibility	Owner, building manager