B-AD8

COOLING EQUIPMENT

Number	B-AD8
Indicator name	Cooling equipment
Area	A
Indicator definition	The indicator is set as a point score depending on the type of building cooling installed. The score is constructed on the basis of a combination of the efficiency of a given type of equipment and its energy intensity (impact on the production of CO2 emissions).
Indicator unit	Point score
Key words	Cooling, overheating, indoor environment, microclimate
Reason for tracking and usability	The indicator monitors which methods are used in the building for active cooling. Active cooling is most often solved by air-to-air conditioning units. Only fixed units are included, not mobile air conditioners. Other cooling methods are included. When cooling based on the principle of heat exchange during the change of state, it is necessary to keep in mind that the production of cold produces heat outside the building and consumes electricity. From this point of view (mitigation synergy) there are more favourable technologies and some of them are inherently on the verge of passive and active cooling. As it is not possible to calculate the exact physical and energy parameters of the evaluated buildings for the indicative evaluation, values (weighing) are assigned to individual types of cooling with regard to efficiency and mitigation impacts.
Completeness, representativeness, validity	The indicator provides only a highly indicative assessment of the technology used in the building. The specific technology, product, parameters are not taken into account. The indicator does not take into account the energy source of the cooling. If cooling is provided exclusively from renewable energy sources, the assessment is not appropriate.

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Description of data processing	Qualitative parameters specify the most frequently used refrigeration equipment and the average adaptation and mitigation contribution. Quantitative parameters determine the coefficients that indicate the effect of the refrigeration equipment used. The value of the indicator is calculated as a multiple of the coefficient of the scoring table and the scale. E.g. the worst variant is when an air-conditioning system is used, which has a negative impact on CO2 emissions due to high production, as well as no refrigeration equipment, without which a stay in some areas is problematic in summer due to high interior overheating. Rating table: Technology (Adaptation and Mitigation points) Total rating - No cooling system (5; 1): 3 points - Passive cooling (via low temperature circuits in the structure) (1; 1): 1 point- Ventilation system with heat recovery (with bypass) (2; 1) 1,5 points - Ventilation system with integrated cooler (1; 3) 2 points - Ventilation system with ground heat exchanger (2; 1): 1,5 points - Air conditioning (split air conditioning) (1; 5): 3 points
Data source	Own data of the owner/administrator, project documentation of TSB (technical security of the building)
Tracking frequency	One time, at change
Urban influence	The city/city district/municipality can directly invest in the technical security of buildings owned by it, or support these measures on the buildings of other owners financially or otherwise.
Presentation method	The results will be presented in a uniform KLIMASKEN framework on a five-point scale according to the sum of points from the evaluation table: 5 (E) 4 (D) 3 (C) 2 (B) 1 (A) 3 2,5 2 1,5 1
Responsibility	Owner, building manager