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Best practice:

RESISTENT SUBURBS - TAKING CLIMATE ACTION

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Best practice summary

- ▶ Climate change to be more intensive in cities
- ▶ Bratislava, housing estate Dlhé diely
- ▶ Common architectural heritage of the V4 countries
- ▶ 5 partners' common project on complex adaptation and mitigation measures with 3 main areas of focus:

1. CLIMATIC ACTION PLAN OF CITY DISTRICT

2. CREATING A TOOL IN EVALUATING CLIMATIC RESISTANCE AND MONITOR THE PROGRESS

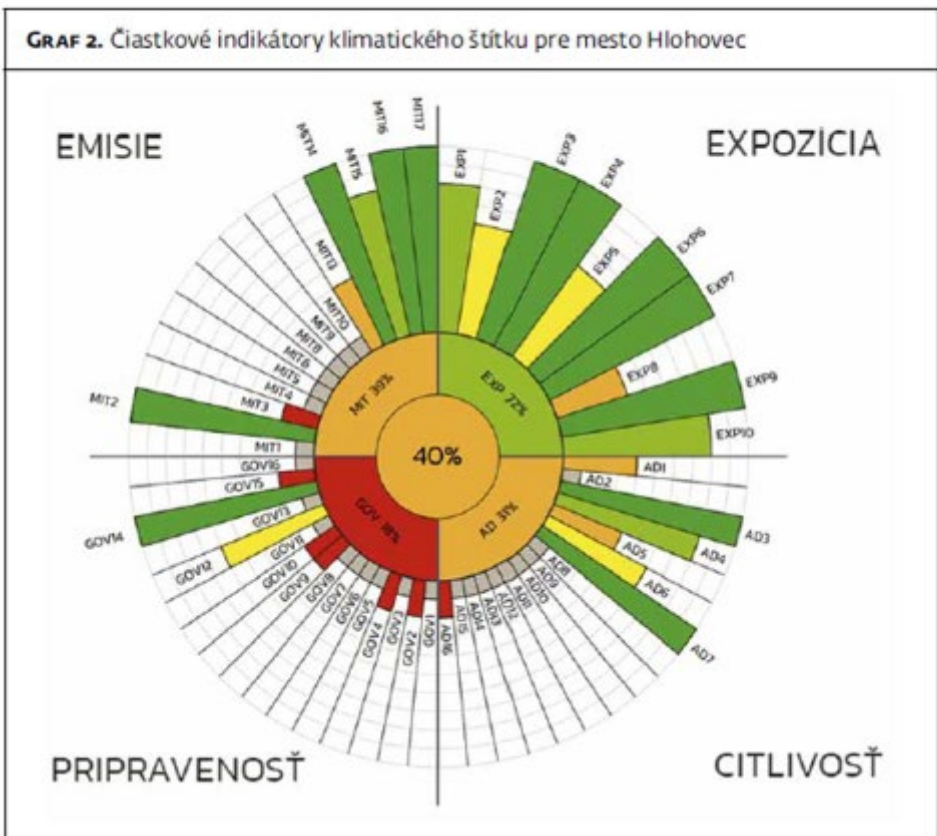
3. CREATING A CATALOGUE OF POSSIBLE ADAPTATION AND MITIGATION MEASURES + IMPLEMENTATION

- ▶ **Duration of project:** June 15, 2018 - 15.12.2023

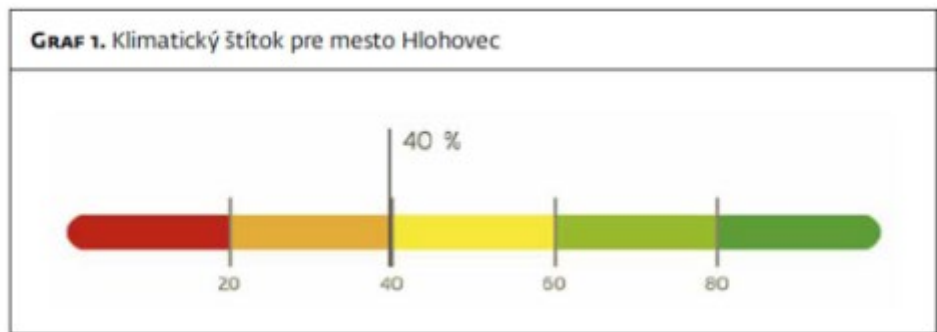
Klimasken

- ▶ KLIMASKEN is an online tool for **evaluating** the climate resilience of cities
- ▶ **several dozen indicators designed by a professional team and tested in Slovakia and the Czech Republic**
- ▶ **Climate label (circle graph)** - 4 parts (emissions, climatic data, vulnerability, preparedness - partial and total average value)

GRAF 2. Čiastkové indikátory klimatického štítiku pre mesto Hlohovec



GRAF 1. Klimatický štítok pre mesto Hlohovec



Climate label

Example of Klimasken indicators

INDICATORS OF EXPOSITION

- ▶ risk of floods
- ▶ risk of infrastructure damage by floods
- ▶ risk of damage on buildings due to meteorological factors
- ▶ difference of average yearly temperature from the long-term normal

INDICATORS OF VULNERABILITY AND ADAPTATION CAPACITY

- ▶ Insulation of outer walls
- ▶ Insulation of roof
- ▶ Transparent constructions
- ▶ Shadow-casting constructions and shadow-casting by constructions
- ▶ Shadow-casting by constructions and by greenery
- ▶ Vegetation roofs and cobble roofs
- ▶ Color of buildings

- ▶ Cooling systems
- ▶ Airing systems
- ▶ Capacity of building to retain rainwater

INDICATORS OF EMISSIONS

- ▶ Heat consumption in the building
- ▶ Electricity consumption in the building
- ▶ Production of mixed municipal waste in the building
- ▶ Production of wastewater in the building

INDICATORS OF PREPAREDNESS

- ▶ Technical measures against floods/excess rainfall in the building
- ▶ Rainwater retention around the building
- ▶ Rainwater harvesting in the building
- ▶ Security/preventive measures against natural disasters

Catalogue of adaptation and mitigation measures I.

Implemented in the city district:

- ▶ A) CONSTRUCTIONAL - building insulations (2 buildings), outdoor shadow-casting (2 buildings), solar (50) fotovoltaic (86) panels (2 buildings), controlled ventilation (2 buildings), rainwater harvesting (2 buildings), rain gardens, permeable parking lots)



Catalogue of adaptation and mitigation measures II.

- ▶ B) GREEN - green roofs (on 3 buildings), green façade (1 building - 3 outer walls), rainwater collection (blue-green infrastructure - 1 wetland spot, grey infrastructure - catching the rainwater)



Prepracovanie projektu stavby Obnova Materskej školy Kolískova, Bratislava - Karlova Ves. 06/2019

Pohľad na triedy zo záhrady



Catalogue of adaptation and mitigation measures III.

- ▶ Additional activities: public space revitalizations, measurement of CO2 level in classrooms



Methods of funding

- ▶ LIFE LIFE17 CCA/SK/000126 - LIFE DELIVER
- ▶ Total budget 2 446 523 EUR (60% EÚ, 40% SK cofinancing)

Excellent elements

- ▶ Complex evaluation and monitoring tool
- ▶ Implementation of a complex of measures on 2 buildings - thorough reconstruction

Community involvement

- ▶ children participating in green activities
- ▶ Questionnaire survey among the city district 's inhabitants (397 responses) - 3x, november 2018, 2020 and 2023

Further info

- ▶ www.klimasken.sk
- ▶ www.odolnesidliska.sk

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