

Introducing the recommended heatwave vulnerability assessment framework for the LIFE COOL ZONE project

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Project partners:

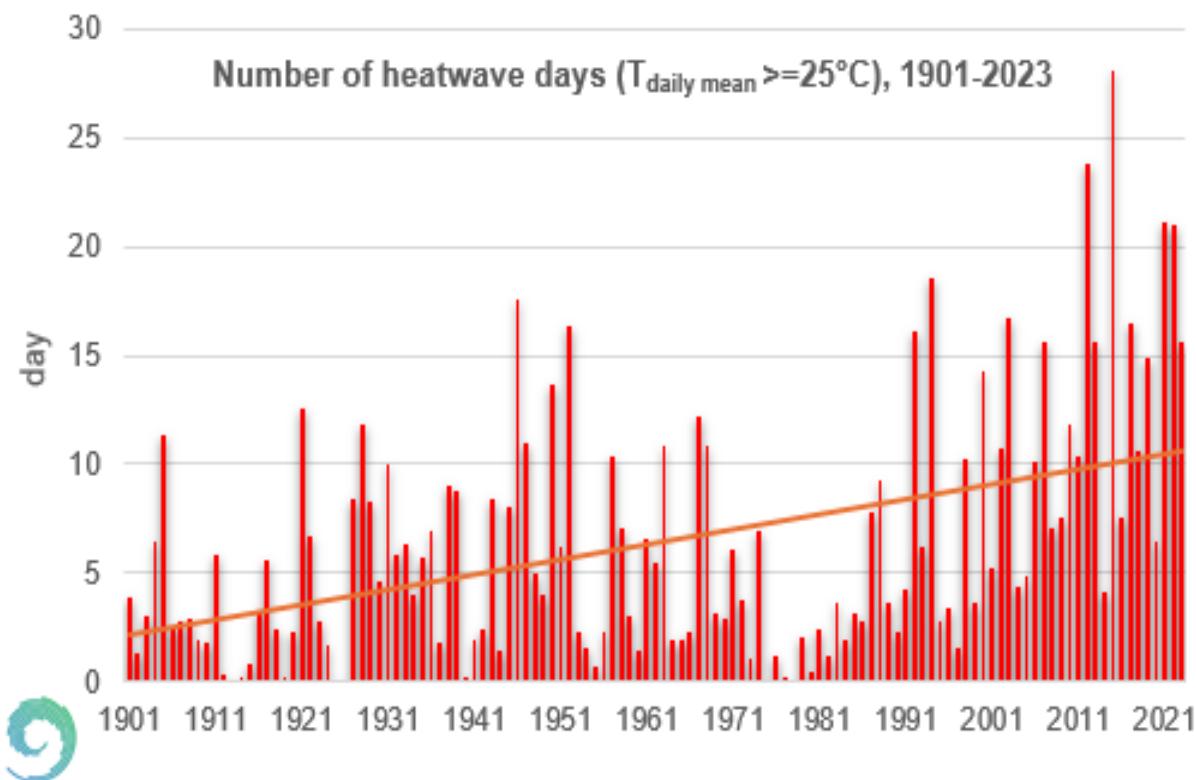
Ministry of Public Administration and Regional Development (lead partner),
HungaroMet,
Lechner Knowledge Centre,
Municipality of Debrecen,
Municipality of Oradea,
Association of Climate Friendly Municipalities.



Funded by
the European Union

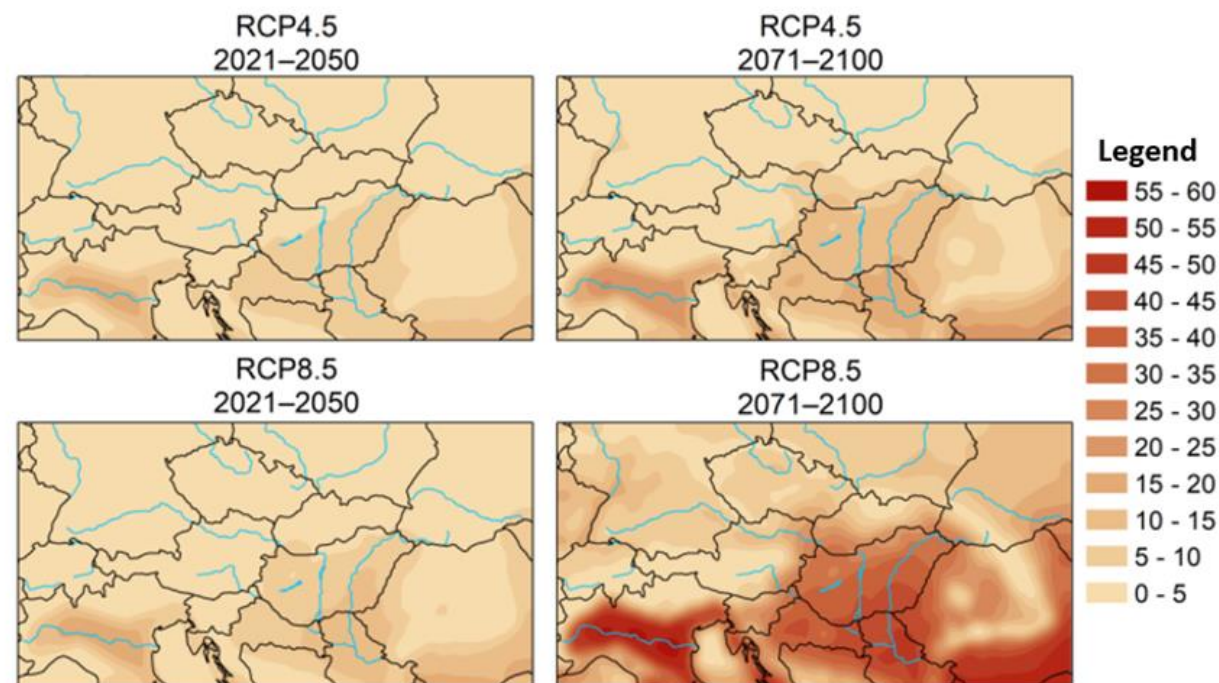


Background – heatwaves



Number of heatwave days in Hungary between 1901 and 2023 based on homogenized, verified, interpolated data series.

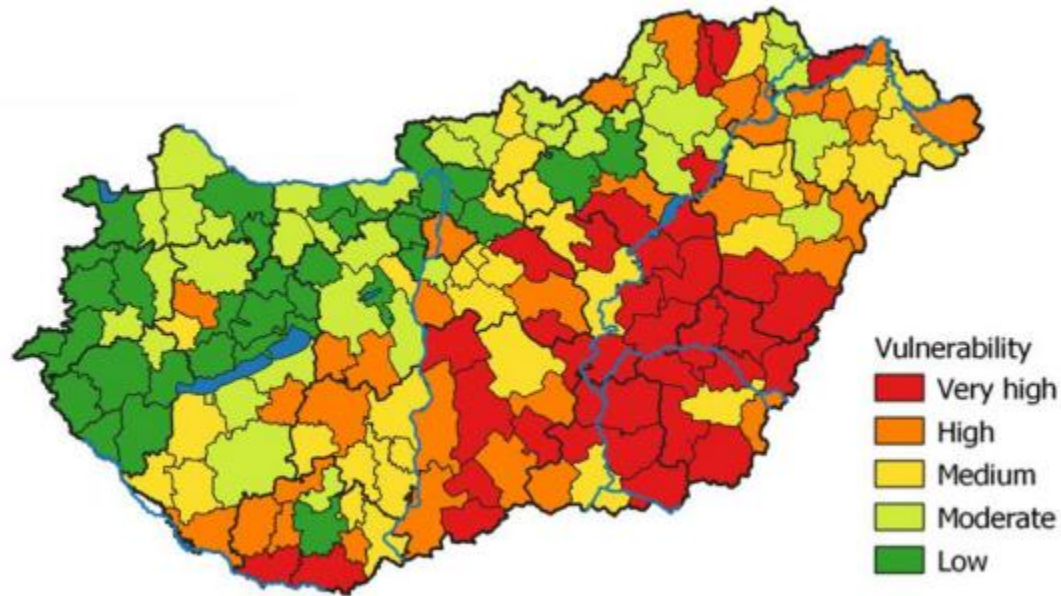
Source: HungaroMet Nonprofit Ltd.



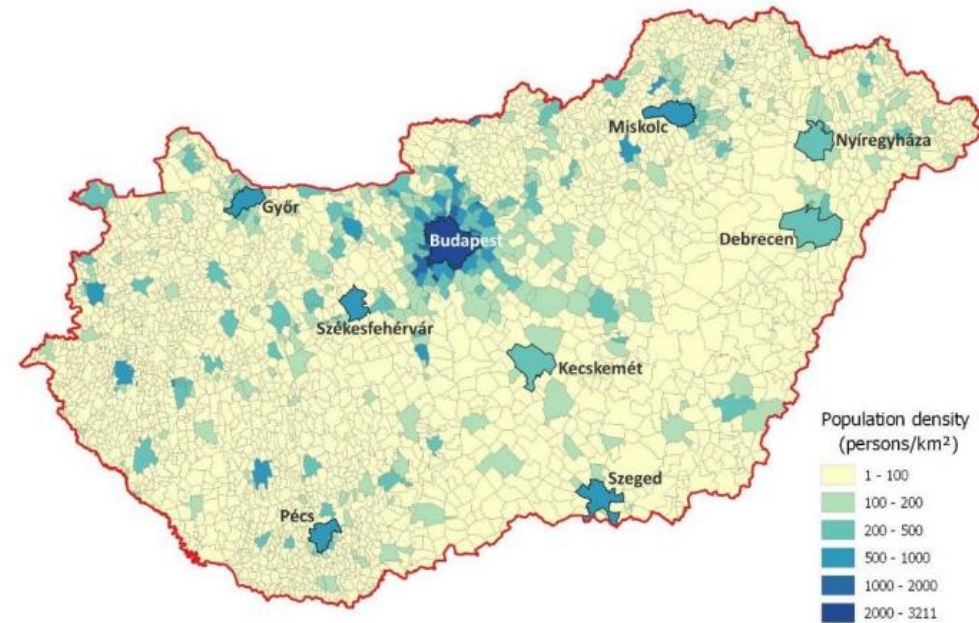
Expected change in the number of heatwave days in the 21st century between the moderate (RCP4.5 - above) and the rapidly increasing (RCP8.5 - bottom) emission scenarios - RCA4/EC-EARTH climate model simulations.

Source: NAGiS, source of basic data: EURO-CORDEX, SMHI

Scientific basis for intervention areas

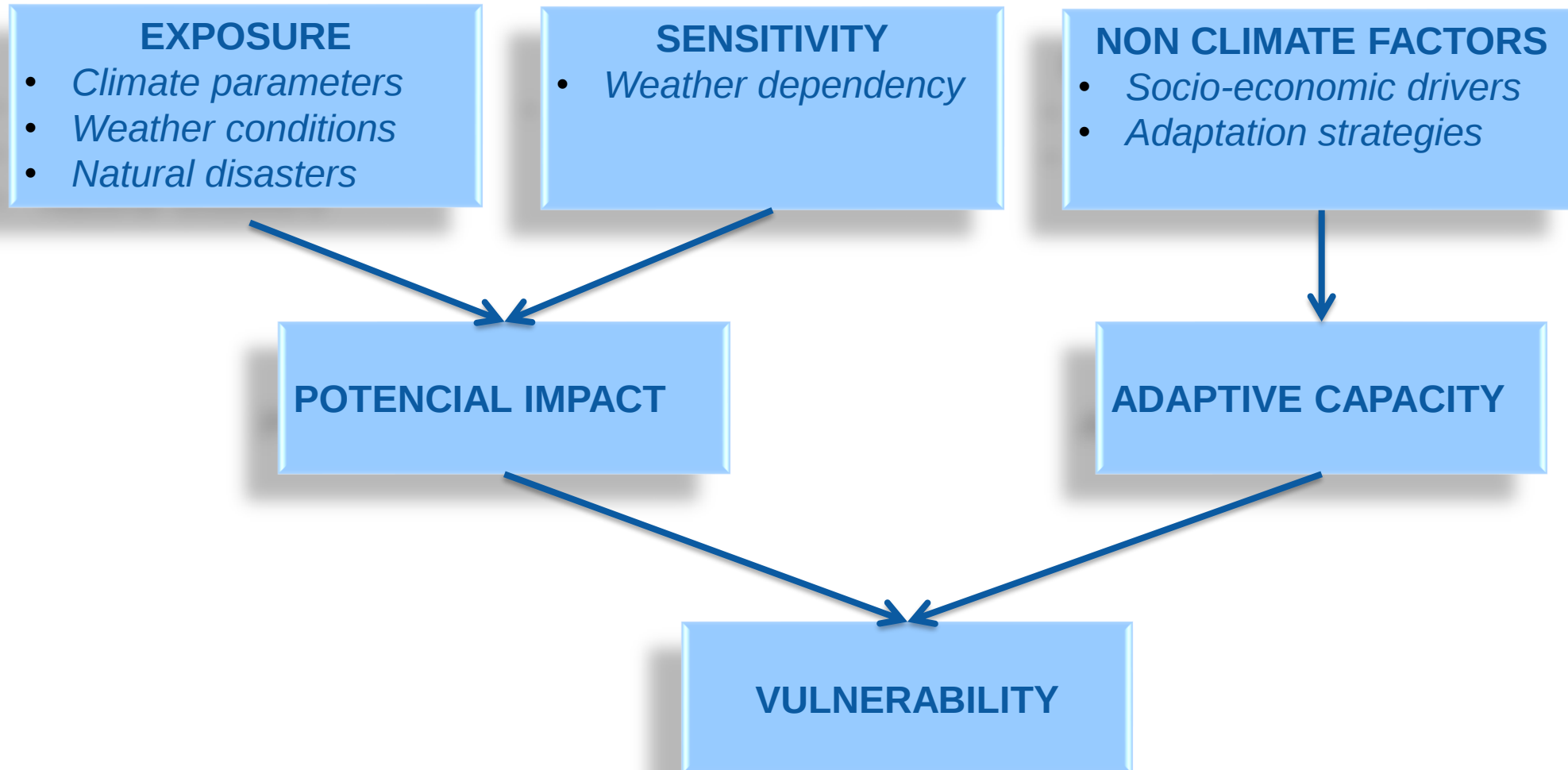


Complex vulnerability to the effects of heat waves at district level in Hungary
Source: HungaroMet Nonprofit Ltd.

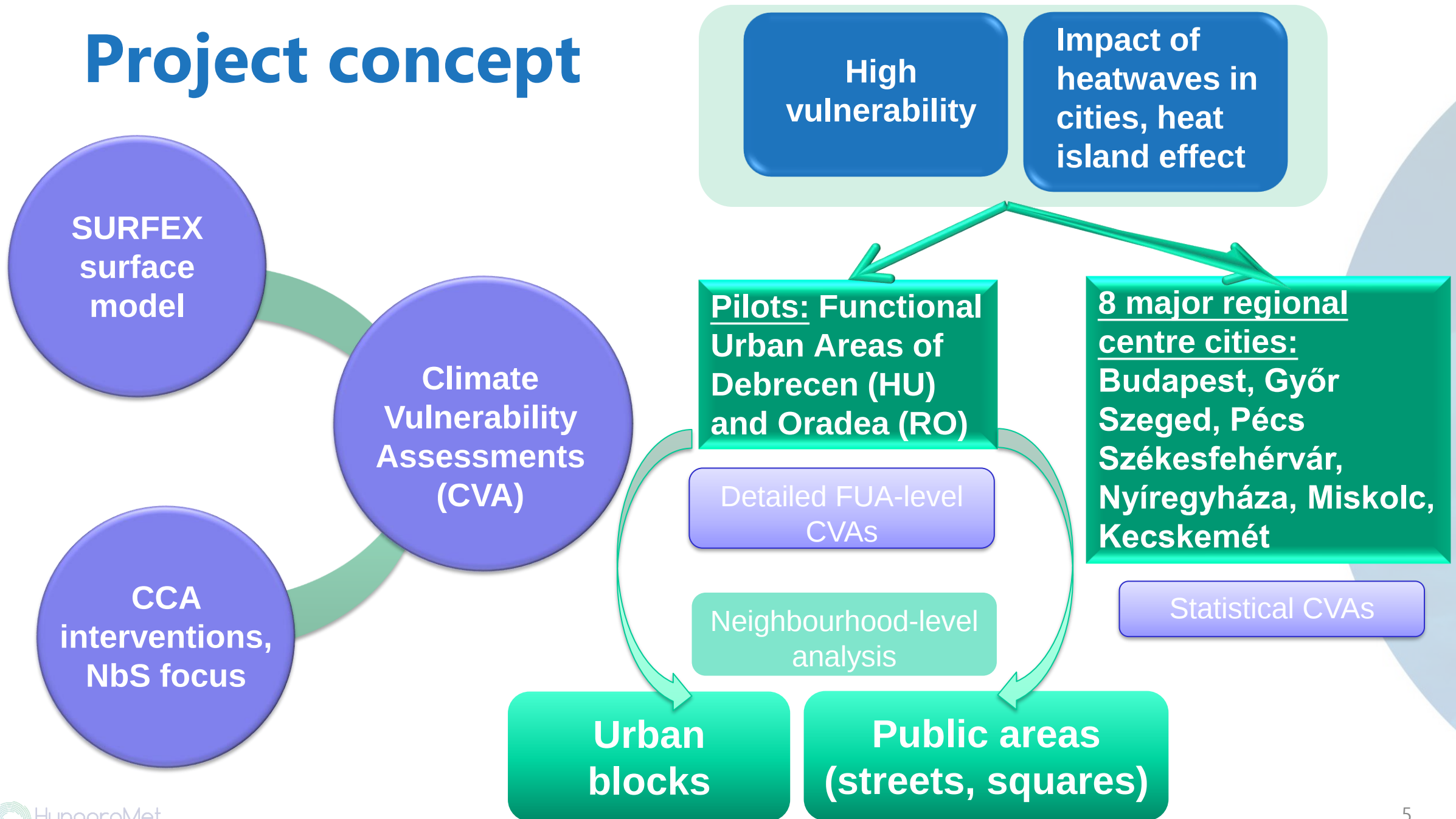


Population density differences of Hungary (2023)
Source: Hungarian Central Statistical Office

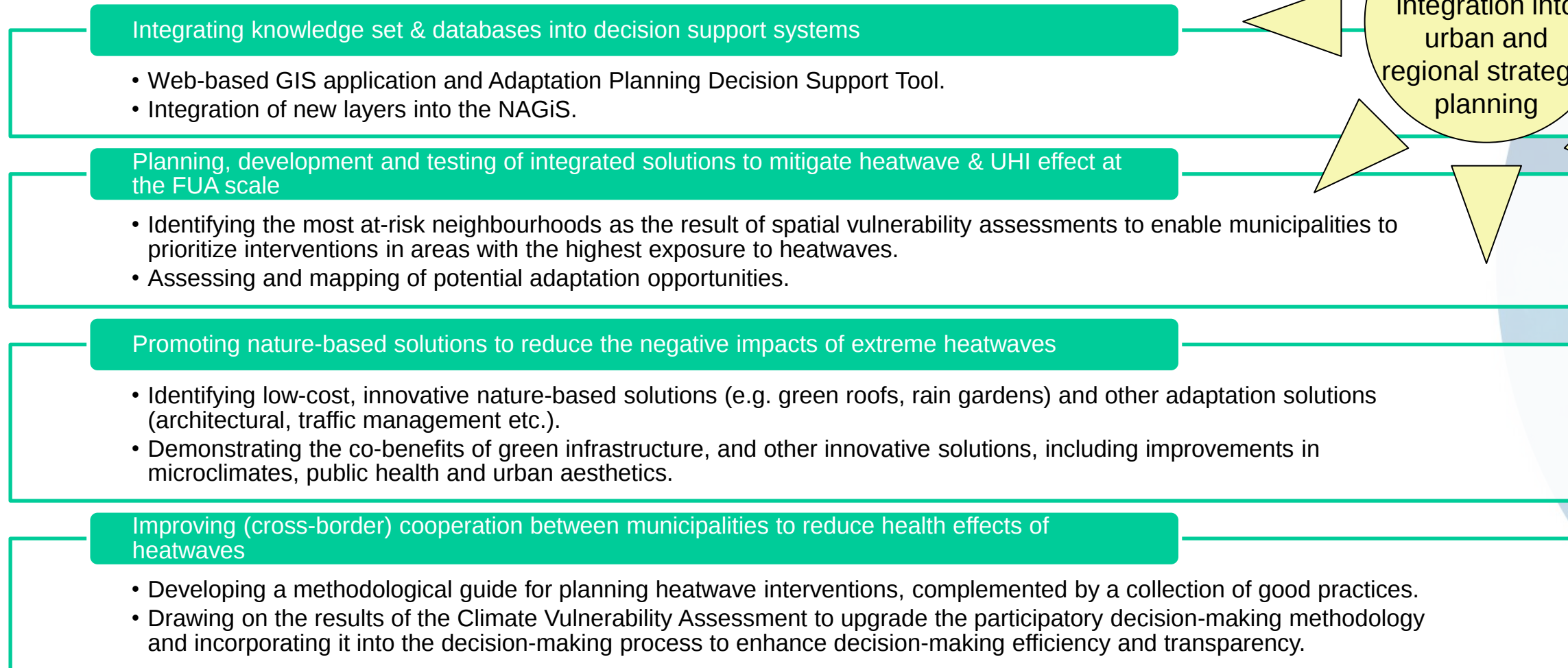
NAGiS VULNERABILITY ASSESSMENT MODEL STRUCTURE



Project concept



Utilisation of the heatwave vulnerability assessment results in the project



Potential applications of the project results

Support Programme for innovative project ideas:

- Collaborative environment
- Developing and exchanging best practices
- Integration of resources and expertise
- Climate adaptation measures implemented through financial support for municipal developments

Replication potential:

- Climate Vulnerability Assessment Methodology for which database and new thematic map layers will be integrated to the NAGiS
- Climate Platforms
- Pilot projects implemented in Debrecen and Nagyvárad
- Good practices used in other FUAs/cities

Upscaling potential:

- Integrated Municipal Decision Support Platform for Public and Private Sector Scaling
- Emphasizing FUA-level planning and cooperation in regional development
- After-LIFE Conservation Plan

Strategies for multiplying impact:

- Dissemination of knowledge and best practices
- Policy recommendations incorporated into municipal, FUA-level and national sectoral planning
- Organizing networking events to encourage collaboration across regions facing similar challenges

Thank you for your attention!