

18.8 Development of a climate resilience strategy (extent)

Project Name: UNaLab (Grant Agreement no. 730052)

Author/s and affiliations: Laura Wendling¹, Ville Rinta-Hiiri¹, Maria Dubovik¹, Arto Laikari¹, Johannes Jermakka¹, Zarrin Fatima¹, Malin zu-Castell Rüdenhausen¹, Peter Roebeling², Ricardo Martins², Rita Mendonça²

¹ VTT Technical Research Centre Ltd, P.O. Box 1000 FI-02044 VTT, Finland

² CESAM – Department of Environment and Planning, University of Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal

Degree of development of climate resilience strategy	Participatory Planning and Governance
Description and justification	Many climate resilience strategies are linked with disaster and risk reduction as the impacts of climate change are commonly experienced in urban areas as flooding and/or drought, and over-heating (urban heat island effect). Nature-based solutions are a key tool for use in urban climate change mitigation and adaptation efforts.
Definition	The extent to which the city has developed and implemented a climate resilience strategy
Strengths and weaknesses	<ul style="list-style-type: none"> + Projects involving NBS can increase awareness of ecosystem based adaptation to climate change and encourage the development of municipal climate resilience strategies that incorporate natural solutions to climate change impacts + Increased awareness of NBS benefits + Easy to evaluate - An overly simple assessment
Measurement procedure and tool	<p>The metric is evaluated using a seven-point Likert scale based on the steps suggested by the “Mayors adapt” initiative for climate change adaptation in urban areas (Bosch et al., 2017; Climate Adapt, n.d.):</p> <p style="text-align: center;">No action – 1 – 2 – 3 – 4 – 5 – 6 – 7 –</p> <p style="text-align: right;">Implementation, monitoring and evaluation</p> <ol style="list-style-type: none"> 1. No action has been taken yet 2. The ground for adaptation has been prepared (the basis for a successful adaptation process) 3. Risks and vulnerabilities have been assessed 4. Adaptation options have been identified 5. Adaptation options have been selected 6. Adaptation options are being implemented 7. Monitoring and evaluation is being carried out.

Scale of measurement	Municipal scale
Data source	
Required data	Information on the development and implementation of climate resilience strategy in the city
Data input type	Qualitative
Data collection frequency	Annually
Level of expertise required	Low
Synergies with other indicators	Relation to <i>Openness of participatory processes, Policy learning concerning adapting policies and strategic plans, New forms of financing</i> indicators
Connection with SDGs	SDG 6 Clean water and sanitation, SDG 10 Reduced inequalities, SDG 11 Sustainable cities and communities, SDG 13 Climate action, SDG 15 Life on land
Opportunities for participatory data collection	No opportunities identified
Additional information	
References	<p>Bosch, P., Jongeneel, S., Rovers, V., Neumann, H.-M., Airaksinen, M., & Huovila, A. (2017). CITYkeys indicators for smart city projects and smart cities. CITYkeys D1.4. Retrieved from http://nws.eurocities.eu/MediaShell/media/CITYkeysD14Indicatorsforsmartcityprojectsandsmartcities.pdf</p> <p>Climate Adapt. (n.d.). About the Urban Adaptation Support Tool. https://climate-adapt.eea.europa.eu/knowledge/tools/urban-ast/step-0-1</p>