

Report on solutions at urban level

Deliverable 3.4

September 2017

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Summary

Air pollution and the urban heat island effect are consequences of climate change that affect vulnerable population groups in urban areas. To tackle these effects, adequate strategies at the urban level are required. The report outlines tailor-made solutions at the urban level by conducting a SWOT (Strength-Weaknesses-Opportunities-Threats) analysis and a stakeholder survey for the iSCAPE Living Lab (LL) Cities of Bologna, Bottrop, Dublin, Guildford, Hasselt and Vantaa.

The report identifies relevant urban parameters that influence urban air quality and the emergence of urban heat islands as ‘urban structure’, ‘transport’, ‘industry and trade’ as well as ‘urban green and blue infrastructure’. Each of these parameters were each equipped with specific indicators to analyse the cities’ strengths, weaknesses, opportunities and threats in these specific fields.

For the parameter ‘urban structure’, the indicators ‘sealed ground’, ‘population density’ and ‘urban development model’ were used. The ‘transport’ network was represented through the ‘commuter outflow’ and the ‘density of motorways’ for the private sector, the ‘equipment rate for public transport vehicles’ for the public sector, and the ‘number of road freight vehicles’ and the presence of an airport and/or sea freight port’ for the freight sector. For the parameter ‘industry’, the indicator ‘share of industrial are’ was used and the parameter ‘urban green and blue infrastructure’ was analysed with the help of the indicators ‘share of urban green’ and ‘share of agricultural land’.

The SWOT analysis of the spatial parameters was supplemented with a SWOT analysis of the results from the stakeholder survey as well as planning documents of the cities. The stakeholder survey was conducted by Future City

Catapult (FCC) in November 2016; its results are collected in the iSCAPE Deliverable D1.1 (*Report on Challenges and Opportunities in iSCAPE Cities*¹).

The results from the SWOT analysis were used to develop suitable strategies for each Living Lab City that address the challenges of climate change and improve the air quality. The solutions will serve as a basis for the development of draft plans at the urban level that will be discussed with local stakeholders from the Living Lab at one-day workshops in order to check their usefulness and feasibility.

The full report will be published in March 2017.



The iSCAPE project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 689954. The publication reflects the author's views. The European Commission is not liable for any use that may be made of the information contained therein.

¹ https://www.iscapeproject.eu/wp-content/uploads/2017/05/iSCAPE_City-Challenges-Report-For-Review-v0.3.pdf