

WP 2 – BE and SLOD: SoA, Risks and human behavior

T2.2 – SoA on SLOD (heat wave and pollution) in BE and their effect on health and wellbeing of its users.
Methods for data collection and analysis (on medium/long term datasets). Correlation between pollution and climate data (e.g. wind, rain, fog). Current mitigation solution analysis. Identification of BE features and users' (inappropriate) behaviors modifying SLOD effects/risk levels. Development of indicators and relative weights for selected SLOD risk levels assessment

D2.2.4 – Current BE SLOD risk management and reduction strategies

ABSTRACT. Heat waves, defined as an interval of abnormally hot and humid weather, have been a prominent killer in recent years. In the same way, poor air quality in built environment is becoming a serious public health concern at the global scale mainly in industrialized build environment areas. As discussed in the previous deliverables particulate matter pollution and persistent/intense heat waves are also intimately linked to human health. European Commission is asking each Member States to contrast the actual trend by implementing available mitigation measures. EU policy follows a twin-track approach: by setting legal limits for concentrations of air pollutants and by establishing agreements and standards to reduce emissions and energy intensity at source, i.e. national emission reduction commitments and sector-specific sources. The purpose of this document is to identify the available air pollution and heat wave reduction and mitigation strategies for resilient BE. Based on a qualitative literature review, the following deliverable analysed the available case studies highlighting the mitigation potential and the actual level of implementation. The classification of the mitigation measures is complex due to the fact that the specific effect is influenced by many parameters. Therefore, measures applied in a specific urban context are not suitable for others and vice versa. There is not an “optimal strategy” for urban heat island and air pollution mitigation, it is more likely to invoke a portfolio of different options.

