SMOG A NEW CHALLENGE FOR SPATIAL PLANNING AND URBAN MANAGEMENT - POLISH CASE STUDY

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ABSTRACT

Smog is a serious problem for Polish cities. According to the EEA Report (2017), air pollution contributes to about 48,000 premature deaths in Poland every year (in Warsaw about 3,000). 46,000 of premature deaths are attributed to PM2.5 exposure; 1,700 to NO2; and 970 to O3 exposure. PM2.5 is considered the most harmful to human health among suspended components in the atmosphere. According to WHO report (2016) in 2012-2015, out of 50 UE cities and towns with the highest annual concentration of PM2.5, 33 are located in Poland, and 16 are in the top 20. Fight against smog requires governance which needs adjusting policies, strategy programs and action plans to the hierarchy of needs and the scale of threat. In this presentation we will show well-tried approaches and indicate innovative directions for policy makers, like low-carbon economy, circular economy, new urbanism, healthy city, green city or compact city, to name a few. The actions must be integrated and involve many entities like citizens, national and local authorities, municipal services and economic operators. They must also include many areas, mainly energy, transport, education, monitoring, and all levels of spatial planning and territorial governance. To achieve synergy, actions must be fully vertically and horizontally coordinated. Further legal regulations are necessary, especially in the field of quality standards for solid fuels, limiting or eliminating the use of coal waste and determining methods of law enforcement.