## The effectiveness of law in solving wicked problems. A case study of anti-smog policies in Lesser Poland

## Popular scientific summary of the project

In recent years, the problem of air pollution has become the subject of lively discussions and public interest. This is a sign of the constantly growing awareness of environmental threats, currently associated primarily with climate change. Politicians who have avoided this topic so far have started to look for ways to effectively respond to the deteriorating quality of the natural environment. That response took the form of the so-called anti-smog resolutions, adopted in various provinces of Poland. In Lesser Poland such resolutions were passed in 2016 and 2017 - for the area of the city of Krakow and the rest of the voivodship, respectively. Those resolutions introduced two different regulatory regimes, corresponding to two different philosophies for solving problems similar to air pollution: a philosophy based on prohibitions and enforcement, and a philosophy of economic incentives.

The aim of the project is to create an interdisciplinary research team whose task will be to assess the effectiveness of resolutions adopted in the province of Lesser Poland. We start from the observation that in the case of Lesser Poland we have the rare opportunity to directly measure the effectiveness of the passed regulations and the competing philosophies which are behind it. This is mainly because of the presence in the province of a network of sensors measuring the level of air pollution with mathematical precision.

At the same time, in the case of air pollution, we observe dynamics characteristic of a certain complex class of problems, which are known in literature as *the wicked problems*. The category of wicked problems has been constantly developed in the social sciences since the '70s, and our research team intends to join these efforts by proposing a completely new perspective on wickedness. In our opinion, the institutional dimension of the problem is often responsible for wickedness, the meaning of which has not been properly described in literature so far. It consists in the phenomenon of institutional inertia observed by us, when institutions established to look for solutions, due to the potential responsibility associated with their implementation, try to take, in principle, ineffective actions dependent on the behavior of others (institutions, individuals).

In order to better understand the issue of this phenomenon, we plan to learn more precisely the motives of action and arguments of the parties involved in the process of adopting anti-smog resolutions. Therefore, we will not only examine official documents appearing at various stages of the legislative process, the content of information campaigns or debates on how to effectively combat air pollution, but we will also conduct in-depth interviews with individuals involved in the process of adopting the new law.

As part of the study, we will not only determine the effectiveness of various ways of solving complex, wicked problems like air pollution, but also we will develop the previously unknown area of the theory of such problems from the perspective of theory and sociology of law, where the issue of effectiveness of the law has been studied for many years. This multi-faceted, interdisciplinary perspective is an additional value of the proposed research project, which will adopt the overall structure of the case study. The practical effect of the project will be to develop a set of recommendations for decision-makers who want to effectively solve complex societal problems that bear the signature of wickedness.