

Are "Smart Cities" also "Climate Smart"? An Assessment of the EU Mission "Climate-Neutral and Smart Cities"

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ABSTRACT

Urbanization and the concentration of energy-consuming economic activities make cities responsible for more than 70% of global greenhouse gas emissions. At the same time, cities are becoming increasingly vulnerable to climate change impacts. The EU Mission "Climate-Neutral and Smart Cities", recently launched a call for starting a pathway towards "100 climate-neutral and smart cities by 2030". The list of 336 candidate cities (86% from the EU-27 and 14% from associated or negotiating countries) was published in February 2022. The cities constitute a very large and diverse sample that was used to conduct this timely research to identify the main factors that can drive and support a smart and sustainable transition of urban areas. A critical analysis of the main achievements in five main driving factors (local climate planning, climate emergency declaration, participation in networks, international projects and competitions) provides insights on the main factors driving cities towards climate smart actions. Results show that 76% of the cities have a local climate, in 82% of cases developed under the Global Covenant of Mayors for Climate and Energy, which involves about 75% of the candidate cities. URBACT is the most popular funding programme, with 23% of cities involved in at least one funded project. The five selected driving factors seem to capture fairly well the level of "activism" of the sample cities in pursuing smart and climate-related projects and initiatives (15 of the 16 cities that have initiatives and activities in their background that fall into all five sets of the Venn diagram are among the 112 cities selected in this first phase of Mission 100 CNSC). 90% of the sample cities are part of at least one Transnational Municipal Network, which is the most important influencing factor, among the five analysed, for cities applying for this Mission. The original results of this timely study can be useful to decision-makers at all levels, but especially to other cities, to enhance knowledge on steps to be taken to accelerate the transition to carbon neutrality. Moreover, the rich dataset made available by this research represents an important knowledge base not only for future monitoring of the selected cities' progress during the implementation phases, but also for the desired replication effects in other urban areas.