



Alicante, Spain & Virtual event

Urban Challenges and Sustainable Technological Revolution



Special Session Proposal

Spatial dimensions of climate change

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Abstract

Uncontrollable fires, huge floods, loss of biodiversity and massive extinction of species, consumption of natural resources, flooding of coasts and coastal zones, intense heat, depletion of crops, erosion and soil depletion... We would not stop listing the effects of a major and growing climate disruption. The responsibility for human activity and especially for CO₂ emissions is engaged and warming is irreversible, even if drastic measures are implemented. We may wonder what role the territorial or regional level can play in a global change that is starting and spreading at the global level. And to think that we cannot act locally in the face of such global upheavals.

However, the effects of climate change are well differentiated by areas and have a crucial spatial content. We see that some regions (Gulf of Mexico, California, or Mediterranean) are more prone than others to extreme and unusual weather events, that countries suffer more from water submersion or flooding (Bangladesh or Pakistan), that some areas become unsuitable for agriculture and undergo initial mass migration, or that the effects of heat peaks are on average much greater in urban areas, because of artificialization processes, than in rural areas. Thus, there are very variable territorial impacts of the changes underway, to which are added the effects of the overconsumption of natural resources, such as deforestation in the Amazon forests, sand extraction on the beaches of the Gulf of Guinea, or more modestly the disappearance of hedges in our regions of field crops.

The purpose of this special session is to take stock of these current climate changes and their impact on the territories, but above all to discuss possible territorial responses to this overall change, to avoid climate inaction and give meaning to the slogan "Think Global, Act Local". The presentation and analysis of local initiatives will be privileged, whether they come from groups of actors or local stakeholders, public authorities, enterprises or farms, European

directives and their local declinations, as well as associations or groups from the social and solidarity economy.

For example, communications on:

- Mitigation and local adaptations
- Circular economy, recycling
- Waste treatment, methanation
- Soil protection and degradation
- Soils artificialization
- Alternative energies (wind turbines, photovoltaics, etc.)
- Energy efficiency and ecology
- Water resource management and scarcity
- Local, specific, tangible, intangible resources...
- Territorial governance of resources
- Transport impact and carbon weight
- Urban heat islands and urban revegetation
- Local communities
- Etc.