

Theme 1: **Cities & climate change** **(Imperatives for action)**

The Paris Agreement on Climate Change, Sustainable Development Goals, New Urban Agenda, and Sendai Framework for Disaster Risk Reduction are seeking to construct a new development trajectory. These global commitments both require – and will be supported by – addressing climate change in cities. In this Theme, we invite proposals for sessions and abstracts that specifically aim to exchange knowledge, lessons, and experiences on the impacts of climate change on cities and how cities (their local governments, businesses, and citizens) are adapting and responding to climate change. This theme seeks to map the mitigation and adaptation knowledge needs and the gaps being experienced by cities in the context of realizing global commitments. This Theme could also address the costs and benefits of climate action and inaction; the underpinning of ethics, equity and climate justice in the context of climate change, the role of city residents as agents of change, and the imperatives for actions that achieves low carbon, climate resilient urban pathways, and sustainable development in these contexts.

Theme 2: **Urban emissions, impacts** **and vulnerabilities** **(Science and practice of** **cities)**

As centers for population, infrastructure and economic activities, cities are key contributors to global emissions of greenhouse gases (GHG) and short-lived climate pollutants (SLCPs) as well as key hotspots of climate change impacts and vulnerabilities. Understanding the processes and interlinkages of climate science, emissions, impacts, risks and vulnerabilities are central for co-producing strategies and alternatives to adapt to and mitigate climate change. In this Theme, we invite proposals for sessions and abstracts that aim to provide a better understanding of current and future urban emission drivers and pathways, urban climate impacts, and risks and vulnerabilities in cities. This Theme focuses on how the science of cities can guide the reduction of GHG and SLCP emissions, climate vulnerability, differential risks and help improve resilience. The analysis of social processes driving the construction and reconstruction of urban space, of urban form, design and typology are key considerations. This theme will also include lessons learned from exposure to climate variability, extreme climate events and related responses, and focus on means to improve urban climate detection, attribution and climate information.

Theme 3:
Solutions for the
transition to low carbon
and climate resilient
cities
(Science and practice
for cities)

It is evident that cities need transformative solutions given the scale of the climate change problems. In this Theme, we invite proposals for sessions and abstracts that engage with deep decarbonization pathways for cities and regions; transformative adaptation and resilient urbanization, and the links between the two. This Theme will address sustainable cities from the viewpoint of mitigation-adaptation linkages, as well as the development-linkages (including poverty and inequality) of mitigation and adaptation pathways. Promises of disruptive technologies and innovations; urban infrastructure and design; political leadership; technical, social, policy, governance and institutional innovation and behavior changes are key to such pathways.

Theme 4: **Enabling transformative** **climate action in cities** **(advancing science and** **advancing cities)**

Climate action in cities will take place in a context of a diversity of social, environment, economic, and development objectives. The transformative climate change action required in the short and long term, needs enabling - both through knowledge and actions. In this theme, we invite session proposals and abstracts that share innovative practices, suggest new approaches or develop theoretical and methodological framings of transformative climate action in cities. Transformative climate actions should address poverty and inequality, re-shaping of power relations, and re-conceptualizing visions of what cities are, could be, and should be. Sessions and papers in this Theme may address innovative policies and practices (including policy instruments and insurance), governance and institutions, and leadership and political will. The sessions and abstracts may cover technological, institutional, and social innovation, technology transfer, and climate finance and investment including the issue of planning, implementation, monitoring, and evaluation of the Paris Agreement, the New Urban Agenda, the Sustainable Development Goals, and the Sendai Framework.

Theme 1	Cities & Climate change (Imperatives for action)
1.1	Urban Climate mitigation and adaptation; Knowledge gaps for Paris Agreement, Sendai (DRR), NUA and the SDGs
1.2	Costs and benefits of climate action and inaction
1.3	Climate Change and Sustainable Cities: ethics, equity and climate justice
1.4	Low Carbon and Climate Resilient Urban Development Pathways: imperatives for action

Theme 2	Urban emissions, impacts and vulnerabilities (Science of cities)
2.1	Understanding past and future urban emission pathways
2.2	Future climate change in cities
2.3	Reducing climate exposure, differential vulnerability and risk
2.4	Extreme urban climate events: Impact and responses
2.5	Improving Urban Climate Detection and Attribution, and Climate Information

Theme 3	Transition to low carbon and climate resilient urbanisation (Science for cities)
3.1	Deep Decarbonisation Pathways for cities and regions
3.2	Transformative adaptation and resilient urbanisation
3.3	Sustainable Cities: mitigation, and adaptation, and development linkages
3.4	Promise of disruptive technologies/innovations, urban infrastructure and design
3.5	Technical, social, governance and institutional innovation and behaviour change

Theme 4	Enabling transformative climate action in cities (advancing science & advancing cities)
4.1	Innovative policies inducing large scale transformation
4.2	Climate governance: legal, regulatory and institutional capacity
4.3	Climate financing needs, frameworks and instruments
4.4	Planning, Implementation, Monitoring, Evaluation and Learning (links to PA GST)
4.5	Cases of successful implementation and scaling