



2018-IP15: IPCC Special Report on Cities and Climate Change

The IPCC is currently in its 6th Assessment Report Cycle¹. During this cycle, the Panel will produce three Special Reports, a Methodology Report on national greenhouse gas inventories and the Sixth Assessment Report (AR6). The AR6 Synthesis Report will be finalised in 2022; in time for the first UNFCCC global stocktake when countries will review progress towards their goal of keeping global warming to well below 2 °C while pursuing efforts to limit it to 1.5 °C. The Special Report of most interest to IEAGHG, and the scientific media, is IPCC Special Report on 1.5 Degrees².

The IPCC is, however, looking ahead to its 7th Assessment Cycle, where a second special report on Cities and Climate Change will be prepared. It is worth noting that cities are home to over half of the world's population and responsible for over 70% of global CO₂ emissions. Hence In its Fifth Assessment Report (AR5), released in 2014, the IPCC identified that many climate risks concentrate in cities, causing vulnerabilities to urban citizens and infrastructure. The IPCC concluded that rapid urbanization has increased the number of vulnerable urban communities, while recognising cities' potential to mitigate emissions in the building, energy and transport sectors, as well as finding synergies between these sectors.

In addition to the Special Report, the IPCC agreed to host a Cities and Climate Change Science Conference to bring climate scientists, practitioners and policymakers together. This conference was held between the 5th – 7th March 2018 in Edmonton (Canada³).

A summary provided by ISSD Reporting Services on the highlights from each day of conference can be found at <http://enb.iisd.org/climate/citiesipcc/2018/>.

A more detailed report that discusses the conference sessions and activities can be found at: <http://enb.iisd.org/climate/citiesipcc/2018/html/enbplus172num42e.html>

The key aims of the conference were:

- To take stock of scientific literature, data and other sources of knowledge on cities and climate change since the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5), and to build ongoing work under AR6 to be completed in 2022.
- To identify gaps to stimulate new research to be assessed by an IPCC special report on climate change and cities during the IPCC's seventh assessment cycle, and develop assessment frameworks that consider the systemic linkages, synergies and trade-offs between urban systems and climate change.

The headline from the was that the Conference “**Agreed a Research Agenda to Better Understand Climate Change Impacts on Cities**”, see: <http://sdg.iisd.org/news/conference-agrees-research-agenda-to-better-understand-climate-change-impacts-on-cities/>

The conference was organised around 4 themes:

On theme one, **Cities and climate change (imperatives for action)**, take away messages from the conference included:

- An integrated framework across the various global agendas to help cities respond to climate change;

¹ https://www.ipcc.ch/pdf/ar6_material/AC6_brochure_en.pdf

² <http://www.ipcc.ch/report/sr15/>

³ https://www.edmonton.ca/attractions_events/schedule_festivals_events/cities-and-climate-change-science-conference.aspx



- There is an urgent need to catalyse sustainable consumption, production and circular economics;
- The informal sector⁴ to have a voice;
- There needs to be a balance between bottom-up and top-down approaches,
- There is a need for an integrated framework across global agendas to help cities respond to climate change;

Theme 2; ***Urban Emissions, Impacts, and Vulnerabilities***, highlighted that feedback loops between research and practice can address knowledge gaps, and that multidisciplinary data will enable more accurate observation to design responses.

Theme 3; ***Solutions for the transition to low carbon and climate resilient cities (science and practice for cities)***, discussions focused on exploring opportunities and risks from new and old technologies; monitoring, evaluating, learning and accountability; and linking action beyond urban boundaries.

Finally, Theme 4; ***Enabling transformative climate action in cities (advancing science and advancing cities)***, discussion topics included: informal settlements and economies; urban perspectives on climate adaptation finance; youth voices and climate change knowledge; supporting implementation of Nationally Determined Contributions (NDCs) in urban areas and vertical integration of climate actions; and finance for climate action in cities.

Participants also considered how science could collaborate with policy and practice to transform cities into climate-smart, equitable and sustainable homes for all. In addition, the need for the following was considered:

- solution-oriented knowledge;
- strengthening the social sciences to better understand complex issues, such as the role of informal settlements in addressing climate change;
- In addition, research that focuses on issues of equity, power distribution, integration of values, and human behaviour to create real transformative changes in cities.

Key points that emerged during the conference included:

- There is a limited availability, quality and accessibility of city-level data on GHG emissions;
- There is limited literature on climate change regarding cities in developing countries;
- The special challenge to assessment presented by the informal sector;
- The understanding of policy and governance systems remains limited and fragmented.

It is planned to publish a peer reviewed set of proceedings from the conference that can be referenced by future IPCC report including in AR6 and the IPCC special report on cities and climate change.

Comment

The conference underscore the key role and importance of cities in achieving the Paris goals. The conclusions from the conference demonstrate there is a lot of work to be done.

John Gale
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⁴ The informal sector, informal economy, or grey economy is the part of an economy that is neither taxed nor monitored by any form of government. Unlike the formal economy, activities of the informal economy are not included in a country's gross national product (GNP) or gross domestic product (GDP).