

# CITIES

2018 • CONFERENCE

# IPCC

# Cities & Climate Change Science Conference

MARCH 5 - 7, 2018

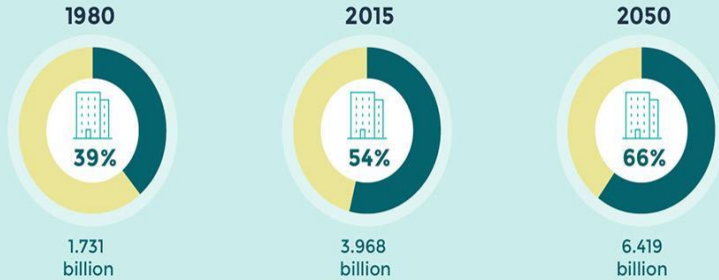
EDMONTON, ALBERTA, CANADA

Dr. Shobhakar Dhakal  
*Co-Chair, Scientific Steering Committee*  
citiesIPCC 2018 Conference

*Head, Department of Energy, Environment and Climate Change*  
*Asian Institute of Technology (AIT), Thailand*

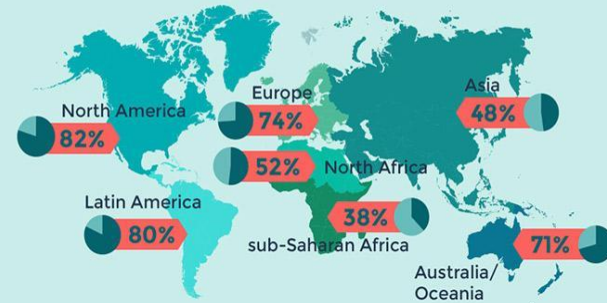
# Why cities?

## Share of the Urban Population Worldwide



Source: United Nations, Department of Economic and Social Affairs, Population Division (2014).  
World Urbanization Prospects: The 2014 Revision, custom data acquired via website

## Share of Urban Population on all Continents



Source: United Nations Department of Economic and Social Affairs (UNDESA) 2016, online database

# Why cities?



Cities are key to solving the challenge of climate change and highly vulnerable to its impacts.



# History

**IPCC AR 5 – Cities are highlighted as an increasingly important topic**

**43<sup>th</sup> IPCC Plenary April 2016: Discussions on proposals for a Special Report on Cities in AR7 Cycle**

**44<sup>th</sup> IPCC Plenary October 2016: Proposal for Cities IPCC conference approved**

**Contribute to AR 6 and AR 7; specifically to Special Report on Cities**

# Conference aims and goals

## Conference aims:

- to inspire the next frontier of research on the science of cities and climate change

## Primary goals:

- to assess the state of academic and practice-based knowledge related to cities and climate change,
- and to establish a global research agenda based on the joint identification of key gaps by the academic, practitioner and urban policy-making communities

## Specific goals:

- to stimulate research underpinning effective and efficient urban responses to climate change
- to provide inputs to the products of the Intergovernmental Panel on Climate Change (IPCC)

## Expected outcomes

- ❑ Improve scientific knowledge and stimulate new research
- ❑ Forge stronger partnerships between communities
- ❑ Promote joint knowledge production
- ❑ Connect data platforms and initiate new ones
- ❑ Catalyze funding to meet these goals

# CitiesIPCC Partnership





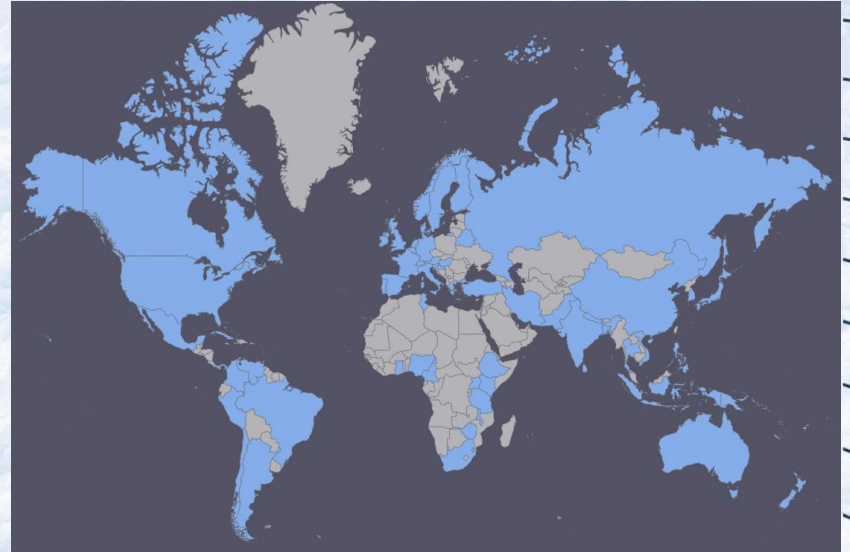
# Scientific Steering Committee

- **Dr. Shobhakar Dhakal**  
Asian Institute of Technology, Thailand
- **Dr. Helen Cleugh**  
CSIRO Climate Science Centre, Australia
- **Prof. Valérie Masson-Delmotte**  
LSCE, France
- **Seth Schultz**  
C40 Climate Leadership Group, USA
- **Prof. Richard Dawson**  
Newcastle University, UK
- **Dr. Debra Roberts**  
eThekweni Municipality, Durban, South Africa
- **Prof. Diana Ürge-Vorsatz**  
Central European University, Hungary
- **Dr. Gian Carlo Delgado**  
National Autonomous University of Mexico, Mexico
- **Prof. Roberto Sanchez**  
El Colegio de la Frontera Norte, Mexico
- **Prof. Xuemei Bai**  
Australian National University, Australia
- **Dr. David Dodman**  
International Institute for Environmental Development, UK
- **Dr. Cynthia Rosenzweig**  
NASA Goddard Institute for Space Studies, USA
- **Dr. Aliyu Barau**  
Bayero University Kano, Nigeria
- **Lykke Leonardsen**  
City of Copenhagen, Denmark
- **Prof. Karen Seto**  
Yale University, USA
- **Prof. William Solecki,**  
CUNY Institute for Sustainable Cities,  
USA
- **Maryke van Staden,**  
ICLEI, South Africa
- **Dr. Megan Melamed,** International  
Global Atmospheric Chemistry (IGAC), USA



# Conference participation

- **Academics**
  - **Researchers**
  - **Policy makers**
  - **Urban practitioners**
  - **Private sector representatives**
  - **Indigenous leaders**
  - **Youth**
- 
- **700+ delegates**
  - **64 countries**
  - **32% participants from Global South**
  - **49% women, 51% men**



# Conference themes

1. Cities and climate change: imperatives for action
2. Urban emissions, impacts and vulnerabilities: science and practice of cities
3. Solutions for the transition to low-carbon and climate-resilient cities: science and practice for cities
4. Enabling transformative climate action in cities (advancing science and advancing cities)



## Conference sessions

- 7 plenaries
- 49 thematic sessions
- 7 sessions led by SSC
- 76 posters

- Cities and global agendas
- Energy systems
- Climate finance
- Inclusion and informality
- Co-benefits
- Knowledge systems
- Environmental justice
- Big data and smart cities
- Policy-practitioner-academia interactions
- GHG emissions
- Urban climate information
- Climate risks and vulnerabilities
- Human health and climate change
- Urban climate governance
- Urban adaptation and resilience building
- Urban green infrastructure and built environment
- Urban heat island effect
- Urban mobility and climate migration
- City climate action
- Low-carbon transition in cities
- Youth and climate change



# Outcomes

- **Conference Proceedings**
- **A global research agenda** on cities and climate change that advances climate change science and gives recognition and visibility to the knowledge generated by urban stakeholders
- **Enhanced understanding of the impacts of climate change** at the urban level, the range of possible responses and the role of cities in the implementation of the Paris Agreement; and
- **Better informed climate decision-making at the local level**, as a result of improved relations between the policy, practice and the scientific communities working on/in urban areas, through new projects, platforms and partnerships.

# CitiesIPCC Global Research and Action Agenda

- Co-produced from inputs from plenary and parallel sessions, posters, commissioned papers and conference discussions
- Being drawn together by CitiesIPCC SSC and the support team
- To be presented as part of official CitiesIPCC Conference Report at 48<sup>th</sup> IPCC Plenary, October 2018



On the final day of the conference partners signed the joint statement “The Science we Need for the Cities we Want”, to show their support in bringing this research and action agenda forward. We invite other organisations to sign on to the [statement here](#)

# CitiesIPCC Global Research and Action Agenda

## Key Aspects

- Challenges of Scale
- Data, modelling, scenarios at the city scale
- Importance of systems approach and multiple knowledge systems

## Call for Research and Action

- Informality
- Governance
- Consumption + Production
- Natural and Built Infrastructure
- Finance
- Urban Climate Science
- Vulnerability, risk and resilience
- Urban Planning and Design

## Approaches for academic, urban practitioner and policy-making communities to support Research and Action Agenda

- Global
- National
- Local



# Thanks for your time!

Stay updated with the outcomes and related events

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Twitter: [@cities\\_ipcc](https://twitter.com/cities_ipcc)