

## **New Urban Climate Change Report a Wake-Up Call for Global Policymakers**

*Report Analyzes Climate Risk of 12 Cities in Asia, Latin America, Africa and the U.S.*

More than half the world's population live in cities, many of which are vulnerable to the impacts of climate change. But cities are also emerging as the "first responders" in dealing with climate change, says a major new report led by researchers at [Columbia University](#) and the City University of New York (CUNY) and published by Cambridge University Press.

The report, "Climate Change and Cities: First Assessment Report of the Urban Climate Change Research Network (ARC3)," is the most comprehensive study to date detailing the risks global cities face due to climate. The report, which includes contributions from 110 authors in 50 cities around the world, also explains how urban populations are working to reduce their greenhouse gas emissions and prepare for climate change impacts, such as increased heat waves and drought. Climate trends and projections for twelve cities in Africa, Asia, Latin America and the U.S., including **Athens, Dakar, Delhi, Harare, Kingston, London, Melbourne, New York, São Paulo, Shanghai, Tokyo, and Toronto**, are analyzed in depth.

## **Laporan Terbaru Perubahan Iklim Perkotaan: Sebuah Peringatan Bagi Pembuat Kebijakan Global**

*Laporan Analisa Risiko Iklim 12 Kota di Asia, Amerika Latin, Afrika dan Amerika Serikat*

**JAKARTA, 21 NOVEMBER 2011** - Lebih dari separuh penduduk dunia tinggal di da wilayah perkotaan, yang sangat rentan terhadap dampak perubahan iklim. Namun kota-kota juga bertumbuh sebagai tempat yang "bereaksi pertama" dalam hal urusan dengan perubahan iklim, menurut laporan baru yang digagas oleh para ahli riset di Universitas Columbia dan City University of New York dan dipublikasikan oleh Cambridge University Press.

Laporan, "Perubahan Iklim dan Perkotaan: Laporan Penilaian Pertama dari jaringan Riset Pergantian Iklim Urban (First Assessment Report of the Urban Climate Change Research Network -ARC3)," adalah penelitian yang paling lengkap saat ini dengan penjabarkan detail risiko kota-kota di dunia yang disebabkan oleh iklim. Laporan yang memuat kontribusi dari 110 penulis di 50 kota seluruh dunia tersebut, juga menjelaskan bagaimana penduduk kota berupaya untuk mengurangi emisi gas rumah hijau dan melakukan persiapan terhadap dampak akibat perubahan iklim, seperti naiknya gelombang panas dan kekeringan. Kecenderungan dan proyeksi iklim untuk dua belas kota di Afrika, Asia, Amerika Latin dan Amerika Serikat, termasuk **Athens, Dakar, Delhi, Harare, Kingston, London, Melbourne, New York, São Paulo, Shanghai, Tokyo, dan Toronto**, dianalisa secara mendalam.

“This is a groundbreaking study that should serve as a wake-up call about the need to make cities a key focus of global climate change research and response efforts,” stated Cynthia Rosenzweig, a climate impacts scientist at the [NASA Goddard Institute for Space Studies](#) and the [Center for Climate Systems Research](#), part of the Earth Institute at Columbia University, as well as one of the co-editors of the report. Work on the report was convened by the [Urban Climate Change Research Network](#) (UCCRN), a global coalition of researchers specializing in climate change from an urban perspective. UCCRN was founded at the Earth Institute in 2007.

Some key findings and notable facts that illustrate the urgent need for improved urban preparedness and planning include the following:

- Urban climate change risk results from a combination of hazards, vulnerabilities, and adaptive capacity. In the twelve cities listed above, average temperatures are projected to rise between 1 °C and 4 °C by the 2050s, increasing extreme weather events including heat waves.
- Coastal cities should expect to experience more frequent and more damaging flooding related to storm events in the future due to sea level rise. Particularly at risk are populations like those living in slums located in the lagoons of Lagos.
- In many cities, the quantity and quality of the energy, water, and transport systems will be significantly affected by the projected increases in both flooding and droughts. In developed country cities, leakage from the water supply distribution system can be

“Laporan ini merupakan studi awal yang seharusnya menjadi sebuah peringatan mengenai kebutuhan untuk menjadikan perkotaan sebagai sebuah fokus utama riset perubahan iklim dan usaha-usaha untuk menjawab dampaknya,” kata Cynthia Rosenzweig, seorang ilmuwan dampak iklim di [NASA Goddard Institute for Space Studies](#) dan the [Center for Climate Systems Research](#), bagian dari the Earth Institute di Columbia University, yang juga merupakan salah satu co-editor dari laporan tersebut. Laporan dikerjakan oleh report dilakukan oleh the [Urban Climate Change Research Network](#) (UCCRN), sebuah koalisi global yang terdiri dari ahli riset yang mengkhususkan diri dalam bidang perubahan iklim dalam perspektif urban. UCCRN didirikan di the Earth Institute tahun 2007.

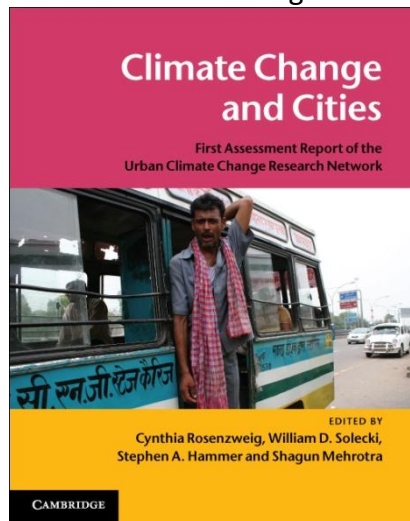
Beberapa temuan kunci dan fakta yang menggambarkan kebutuhan mendesak untuk memperbaiki kesiapan dan perencanaan urban termasuk:

- Resiko perubahan iklim daerah kota terjadi karena kombinasi dari bahaya, mudah diserang, dan kapasitas penyesuaian diri. Di dua belas kota yang terdaftar diatas, suhu udara rata-rata diproyeksikan naik antara 1 °C hingga 4 °C pada tahun 2050an, menaikkan cuaca ekstrim termasuk gelombang panas.
- Kota-kota di pesisir akan mengalami lebih sering banjir yang merusak, berhubungan dengan badai di kemudian hari karena naiknya permukaan laut. Terlebih lagi, yang lebih beresiko adalah penduduk yang tinggal di daerah kumuh yang terletak di laguna-laguna Lagos.
- Di beberapa kota, kuantitas dan kualitas energi, air dan sistem

severe, resulting in system losses of between approximately 5% and more than 30%. Developing country cities may use informal distribution systems, which can be even more vulnerable but whose loss is not as quantifiable.

“Climate change will stress cities in many ways” added William Solecki, director of the CUNY Institute for Sustainable Cities at Hunter College, and co-editor of the study. “There will be more heat waves, threatening the health of the elderly and infirm. Droughts will also become more commonplace in many cities, while in coastal communities too much water may be the problem, due to sea-level rise and more extreme coastal flooding.”

The report notes that there are several positive cases of urban climate change actions that can inspire local government officials in their own planning efforts. “Cities are developing comprehensive climate action plans, but we’re a long way from being prepared, particularly to meet the needs of the world’s poorest urban residents, who are also the most vulnerable,” suggested Shagun Mehrotra, managing director of Climate and Cities at the Center for Climate Systems



transportasi akan sangat terdampak oleh banjir dan kekeringan yang diproyeksikan akan meningkat. Di negara-negara maju, kebocoran dari sistem distribusi suplai air menjadi parah, yang mengakibatkan terjadinya kerugian sistem antara sekitar 5% hingga lebih dari 30%. Kota-kota di negara-negara berkembang mungkin menggunakan sistem distribusi informal, yang dapat lebih rapuh tetapi kerugiannya tidak sebanyak yang dihitung.

“Perubahan iklim akan membuat kota-kota menjadi stres dalam banyak hal” tambah William Solecki, direktur CUNY Institute for Sustainable Cities at Hunter College, dan co-editor dari penelitian ini. “Akan terjadi lebih banyak lagi gelombang panas, mengancam kesehatan para orang tua dan yang lemah. Kekeringan juga akan menjadi hal biasa di banyak daerah perkotaan, sedangkan bagi masyarakat pesisir terlalu banyak air akan menjadi masalah, karena kenaikan permukaan air dan lebih banyak banjir bandang.”

Laporan mencatat bahwa terdapat beberapa kasus positif dari aksi perubahan iklim di daerah kota yang dapat menginspirasi para pejabat pemerintah lokal dalam usaha perencanaan mereka sendiri. “Banyak kota membangun rencana aksi tindak iklim yang komprehensif, namun kami masih jauh dari siap, terlebih untuk memenuhi kebutuhan masyarakat kota yang termiskin di dunia, yang juga paling rentan, “ menurut Shagun Mehrotra, managing director Climate and Cities at the Center for Climate Systems Research dan co-editor dari ARC3.

<p>Research and co-editor of ARC3.</p> <p>“Acting decisively, and acting now, means crafting pathways to sustainable future cities. The greatest gains in city-climate-risk reduction will occur from mainstreaming science-based analysis into ongoing and planned infrastructure investments by private and public sectors.”</p> <p>International organizations led by the World Bank, Cities Alliance, and UN-HABITAT, along with C40, a group of large cities committed to tackling climate change, and ICLEI – Local Governments for Sustainability, are enabling cities to scale-up these efforts.</p> <p>The report focuses on solutions and is a resource to help policymakers and researchers make more informed decisions about how to both manage the impacts of climate change as well as what they can do to reduce their contribution to the problem. It is structured around key themes to help public officials understand the role their existing urban planning systems can play in addressing climate change, in addition to detailing sectoral impacts to local energy systems, water supply, transportation, and public health. The book offers guidance on how cities can assess their climate risks and tackle adaptation, as well as mitigation, providing examples from 48 different cities around the world.</p> <p>“We’ve tried to create a comprehensive study that explains both the challenges and opportunities facing local government managers. It’ll also be a great classroom tool,</p>	<p>“Mengambil keputusan, dan bertindak sekarang, berarti membuka jalan bagi kesinambungan kota-kota di masa depan. Manfaat terbesar dari mengurangi resiko iklim di kota akan terjadi mulai dari analisa mainstream berbasis sains/ilmu pengetahuan hingga investasi infrastruktur terencana yang terus berjalan oleh sektor swasta dan publik .”</p> <p>Organisasi internasional yang dipimpin oleh Bank Dunia, Aliansi Kota-Kota (Cities Alliances) dan UN-HABITAT, bersama dengan C40, sebuah kelompok yang terdiri dari kota-kota besar berkomitmen untuk menangani perubahan iklim, dan ICLEI – Local Governments for Sustainability, dapat membantu kota-kota meningkatkan usaha tersebut.</p> <p>Laporan tersebut fokus pada solusi dan merupakan sumber untuk membantu para pembuat kebijakan dan ahli riset membuat keputusan berdasarkan informasi bagaimana mengelola dampak dari perubahan iklim dan apa yang dapat dilakukan terhadap masalah tersebut. Isi laporan terstruktur seputar tema utama untuk membantu pejabat pemerintah mengerti bagaimana sistem perencanaan urban yang ada dapat berperan dalam mengatasi perubahan iklim, selain dampak sektoral terhadap sistem energi, suplai air, transportasi, dan kesehatan publik. Buku tersebut memberi petunjuk bagaimana kota-kota dapat menilai risiko iklim dan menangani adaptasi, dan juga upaya mitigasi, serta memberi contoh dari 48 kota di seluruh dunia.</p> <p>“Kami telah berusaha menciptakan studi komprehensif yang menjelaskan baik tantangannya maupun peluang-peluang yang dihadapi oleh para pejabat pemerintah. Juga sangat baik untuk dijadikan alat dalam kelas,</p>
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one that we hope will train the next generation of climate change researchers and policymakers,” explained Stephen Hammer, an energy policy expert who served as co-editor and lead author of one of the chapters.

David C. Major, Coordinating Lead Author on ARC3, and Somayya Ali, Project Manager of the report, will be participating at the [World Delta Summit 2011](#) in Jakarta, Indonesia from November 21-24, 2011. The report will see its East Asian launch at the event, following worldwide launches in South America (São Paulo), Europe (Bonn), South Asia (Hyderabad), and North America (New York City).

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#### **About Columbia University**

A leading academic and research university, [Columbia University](#) continually seeks to advance the frontiers of knowledge and to foster a campus community deeply engaged in understanding and addressing the complex global issues of our time. Columbia’s extensive public service initiatives, cultural collaborations and community partnerships help define the University’s underlying values and mission to educate students to be both leading scholars and informed, engaged citizens. Founded in 1754 as King’s College, Columbia University in the City of New York is the fifth oldest institution of higher learning in the United States.

yang kami harap dapat melatih ahli riset generasi mendatang, dalam perubahan iklim dan para pembuat kebijakan, “ jelas Stephen Hammer, ahli kebijakan energi yang menjadi *co-editor* dan *lead author* dari salah satu bab.

David C. Major, Coordinating Lead Author on ARC3, dan Somayya Ali, Project Manager laporan tersebut, akan berpartisipasi pada [World Delta Summit 2011](#) di Jakarta, Indonesia dari 21-24 Nopember, 2011. Dalam laporan akan hadir pada peluncuran acara Asia Timur ini, menyusul peluncuran lainnya di Amerika Selatan (Sao Paulo), Eropa (Bonn), Asia Selatan (Hyderabad), dan Amerika Utara (New York City).

Untuk informasi tambahan silakan kontak:

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