

How cities can lead on climate change solutions

By Ian Klaus on Dec 11, 2018

This week, diplomats from about 130 countries are gathered in Katowice, Poland, for COP24, the latest in the annual series of climate change meetings convened under the United Nations Framework Convention on Climate Change. At the heart of the discussions this year is a grim report released in October by the U.N.'s Intergovernmental Panel on Climate Change — the Special Report on Global Warming of 1.5 degrees C (SR1.5).

The product of more than 90 scientists working from thousands of peer-reviewed studies, SR1.5 laid out the catastrophic effects of exceeding 1.5 degrees C warming over the coming decades. Much of the global news coverage that followed the report's release focused on a chilling projection in the form of a 12-year deadline the IPCC established to limit the most disastrous impacts of planetary warming. "It's a line in the sand," said Debra Roberts, a co-chair of Working Group II of SR1.5.

But the report wasn't just a grave warning: It was also a roadmap to solutions. These solutions were organized around four areas, or systems — energy, land use and ecosystems, cities and infrastructure, and industry. And while urban issues comprise one of those four areas, actions in cities are integral to each system transformation.

Put another way: There is no way to save the planet without serious changes in how city-dwellers live, work, and move. That's a point stressed in this summary of the IPCC report aimed at urban policymakers, which was released at COP24. (I was one of the 21 co-authors of this report.) The necessary changes to limit warming must be made not only by national governments and the private sector, but also by city leaders and the residents of urban areas.

As a co-chair of the working group on impacts, Roberts led the world's top climate scientists through the assessment, drafting, and approval process. A scientist herself, Roberts is the head of the Sustainable and Resilient City Initiatives Unit, eThekweni Municipality, Durban, South Africa. In other words, she is a rare climate expert who's familiar with the scientific, diplomatic, and urban policy issues that this unparalleled global challenge represents.

CityLab asked Roberts to talk about the role city residents can play in delivering climate action, the critical importance of local political decisions, and the responsibility we all have to talk about — and act on — climate change with our neighbors.

Q. What should city residents, far removed from these diplomatic processes, take away from the current climate negotiations and SR1.5 in particular?

A. There are two really important sets of messages. First, we are probably facing a serious existential threat as a species. Along with that very serious message is a second key message about the need for rapid and ambitious action. We are probably

living in the most important period of our species' history. But when you face such a big call to action, such an historic moment, the individual can really feel lost.

What is profoundly important to me about the 1.5 report is that it points to lines of response to this big challenge that we face as a species by identifying four systems that need to go through rapid, unprecedented transformations: energy, land use and ecosystems, urban, and industry. While the public and private sectors certainly have input, the report also calls out that the individual has a role to play, too.

If you think about the energy system, the report tells me is that every element of action is important — all the way from the international to the national, to what I do in my life. **Think about energy systems. I should be able to make choices about what energy I use in my home. Am I able to go off-grid, generate my own electricity, and if I generate excess, put it back in the grid? And if those choices aren't there, then I need to reflect on why I don't have those options. If I don't have leadership which is making it easy for me to make these choices, then I need to change leadership.** It's a real call to action on personal choices, and that we need to be more cognizant of the leaders we put in place at all spheres of government.

Q. The possible impacts outlined in SR1.5 can make the individual feel irrelevant. But there's this line that I found really striking: "Humans are at the center of global climate change: Their actions cause anthropogenic climate change, and social change is key to effectively respond to climate change." How do you put the human back in a story that was once so focused on nation-states and climate regimes?

A. The scientific literature puts people back. That's why those four systems transitions are so important. **When it comes to urban systems, yes we can choose what kind of transport we use. When it comes to land systems, by changing our diets we change the pressures on land. When you think about industry, we are consumers. We are very powerful in terms of our ability to purchase, and we can be more critical of the things we choose to consume.** Those four systems are in the real world. They define many of the ways we live our lives, and they give us the power to influence the outcome.

Every level of activity counts, all the way from changing your lightbulbs to the other end of the spectrum at the climate negotiations. So it's empowering but it also involves a strong responsibility. The science is very clear: There is no physical or chemical law which will stop us from limiting warming to 1.5 degrees C. There is nothing that stands in our way. In fact, the key element is the political and societal will to make these changes.

Q. In the U.S. recently, there's been talk about a "Green New Deal" for climate change. Huge, society-spanning transformation is needed, in other words. But when you look through SR1.5 at the things that every individual in a city can do,

they're things like riding a bike or line-drying laundry. It all sounds so far from this sweeping historical mission.

A. What you and I do, literally in our day-to-day boring lives, is an important element in saving the world. This is a global project. Everybody has to be in on it. You cannot leave a single person out. Before, as you indicated, the scientific debate tended to alienate the person on the street with formulas and graphs and international negotiations that no one really understood. This report is clear: **Hanging out your laundry counts. This change is possible, and we can all contribute to that change.**

Q. How do you encourage the tougher choices that are tied to larger, structural issues — what are frequently referred to in climate science as enabling conditions — that are often determined at the regional and national levels?

A. We need multi-level governance structures that enable us to make choices well beyond the laundry. **When I go to work, I must be able to take a public transport system or access a shared car. And if I'm driving that car, that car must be electrified. Those are the important things. Those are choices I do not have control over. I have control over the laundry I put out on the line.** I don't have a choice around bigger systems of transport, energy production systems, and so on. But the onus is still on me in terms of how democracies work — in calls to action, at the voting booth, in talking to my neighbors and talking to local leadership about this.

That requires more of you than the hanging of the washing. Those enabling conditions — which involve changing policies, promoting effective governance, deployment of technologies in the right kinds of spaces — require us to be active.

Q. In a previous conversation I did here with Michael Ignatieff, we talked about the roles that neighbors must play in making cities work. It's an interesting frame in the climate space, when people sometimes feel helpless: Have they spoken with their neighbors?

A. Everyone has to be in, but it's hard for me to imagine how I'm in a process with somebody sitting in Thailand. I've got a much better sense of the community I live in. **I can say to my neighbors, "OK, where are your solar geysers [a kind of solar water heater]?"** That puts it at a scale that is about human action, and I think that's what this report does. It humanizes not only the impacts — look at how we are already impacted, and how the poor and vulnerable are already disadvantaged — but it put the humans back in the solution space again.

Q. You work in a city and in the international diplomatic arena. What is the status of urban expertise when you're starting to develop a report like this?

A. The IPCC started out largely focused on the natural and physical sciences. But as it became clear that you weren't going to be able to solve climate change through some mysterious new technology, or entirely mitigate your way out of it because of lack of

political ambition, the social sciences have become a more prominent voice in the process. We have drawn in as many practitioners as we could as authors of the report, who have the ability to assess knowledge so that the report speaks to things that are important in the real world.

I, as a local government practitioner, can pick up the report and can see they've looked at the literature on things that are important to me. If you look to chapter 4, you'll see a huge amount of work on the feasibility assessment. That's what I need to know as a practitioner. I need to know if an action is likely to work, and what its enabling conditions are. There's a drive to use the science to fulfill the original IPCC mandate of providing objective information on the causes of climate change, but we're also becoming clearer and smarter around the solutions. The moment you talk about solutions, people must be in that space.

Q. The document has a unique place in diplomatic history, but is also part of a developing story where practitioners and urban perspectives are gaining prominence. But of course, if nation-states don't step up, cities won't have the enabling conditions they need to take action. You operate at both the municipal and international levels. How do you think about that landscape?

A. The practitioner community is a particularly important community. What do I do in my day job as a local government practitioner? **I speak to local leadership and local communities about these issues.** But I am sometimes limited by national laws and policies, then I have to go talk to the national government. Local government can become a force for change. We've experienced that throughout our own work at the city level. Often cities will lead best. People don't phone the president if their house washes away. They phone the mayor. We're most aware of where the challenges lie. Local government has an important role to knock on national government's door and say, "Those policies work; those do not," and explain how you might enable us to do our work better.

To me, the nation-state is not a hallowed thing. It must be in service of the people. And where it disconnects, we as local government bear that responsibility for refocusing their attention and resources where they need to be. The report underscores the importance of local government. It's really where a lot of this action is going to happen.

Q. Local government possesses expertise, and, depending on the tax structure where you are, some resources. But you're really talking about local government as advocate. A bit like the individual with his or her neighbor, the city must advocate with the nation-state.

A. I suppose that's what we're saying as a principle. **To the individual, deal with your neighbor.** As a local government, the national government is a neighbor of sorts. We need to pop our heads over the wall and say, look, we need things to change. This is not a time for complacency.