Cities break new ground

Cities are taking the lead in tackling global environmental problems locally. They form international networks to try to influence global politics and collaborate to share information and best practices.

cities are at the source of many of today's global environmental problems. They also have an important role to play in finding innovative solutions. Cities face severe environmental stresses given they accommodate over half the world's population but only take up 2% of the earth's surface. The concentration of people and their activities – of production and consumption processes – leads to pollution and environmental degradation that require urgent actions to ensure sustainable living.

Several mayors and local government organizations have stated that they recognize their responsibility and will lead the way in tackling environmental problems. But what does this mean in practice? What are cities doing to pioneer global environmental governance? Why do they want to do this? Is their contribution really making a difference at the global level?

On 16 February 2005, the day the Kyoto protocol came into force in 141 countries, the mayor of Seattle launched the idea that at least 141 US local governments should commit to the Kyoto targets, as a response to the non-ratification of the protocol by the federal government. The US Mayors Climate Protection Agreement received 600 signatures by July 2007. Today, 1004 local governments across 50 states, the District of Columbia and Puerto Rico have signed. US mayors promised to reduce greenhouse gas emissions by 7% (or more) below 1990 levels by 2012, thus recognizing the target in the Kyoto protocol. They also urged the federal and state governments to endorse policies and programmes that strive for the same goal.

US cities opposing the Bush administration on climate change triggered a debate on the role of cities as 'norm entrepreneurs' in global environmental governance. Yet this is not the only way in which local governments in America have expressed their views and acted on climate change. Others include the Local Governments for Sustainability (ICLEI) cimate protection campaign (see box right) and the C40 Cities Climate Leadership Group (see box on page 19).

Cities taking up the mantle of global environmental governance and going beyond what their national

By **Sofie Bouteligier**, research fellow at the Global Environmental Governance and Sustainable Development Research Group, University of Leuven, Belgium.

governments are doing is not confined to the United States. This is a global trend which includes strong positioning and concrete projects. Joint achievements are highly visible: local collective action can have far-reaching consequences and a wide influence globally.

Local city initiatives

Barcelona broke new ground in 2000 with its 'solar thermal ordinance', which requires owners of residential and commercial buildings to generate 60% of their hot water needs from solar energy. These led to reduced CO2 emissions of more than 4300 tonnes per year and therefore lower energy bills. The Barcelona initiative prompted national legislation on solar energy and Seville, Madrid and others have followed suit, establishing even more stringent regulations.

Bus Rapid Transit (BRT) systems in Latin America have inspired other cities to develop similar public transport infrastructure. Curitiba in Brazil and Bogotá in Colombia have paved the way with their former political leaders acting

Cities campaign for climate protection

Local Governments for Sustainability (ICLEI), an international alliance of local governments and local government organizations, launched the Cities for Climate Protection Campaign in 1993 to facilitate mitigation at the city level. ICLEI pushed the idea that cities, as major sources of carbon emissions, should be central to devising international climate change policies and responsible for implementing them, whilst recognizing that the actions of single cities would be drops in the ocean. But bringing together 1185 cities in 33 countries would make a genuine difference. To help, cities must:

- conduct baseline emissions inventories and forecasts
- adopt emissions reduction targets within specified timespans
- develop local action plans
- implement policies and measures
- monitor and verify results.

ICLEI provides the cities with information, technical assistance and software tools. Actions have addressed problems relating to waste, energy, biodiversity, transport, water, housing and sustainable tourism. The campaign is one of many of ICLEI's initiatives but has received academic attention due to its success in the United States. www.iclei.org



South Korea considers to build this green city for 77,000 people near its capital Seoul.

as ambassadors of sustainable urban transport. Guayaquil in Ecuador, Jakarta in Indonesia and Pereira in Colombia have also adopted BRT systems, as have Brisbane in Australia, Ottawa in Canada and Rouen in France. Around 40 cities worldwide have adopted BRT systems and even more are planned or under construction.

The city of Berlin and the Berlin Energy Agency developed a model for improving energy efficiency in buildings in 1997. Large public and private buildings were retrofitted (with new technology such as heating control systems, insulation and lights) through contracts between building owners and energy service companies, bringing energy savings of 26% a year. Cities in Bulgaria, Chile, Romania and Slovenia have also used this model.

The C40 Cities Climate Leadership Group initiated a similar initiative together with the Clinton Climate Initiative (CCI): the Energy Efficiency Building Retrofit Programme. CCI set up a partnership with four energy companies (Honeywell, Johnson Controls, Siemens and Trane) and five banks (ABN Amro, Citibank, Deutsche Bank, JPMorgan Chase and UBS). The companies now provide products and services at favourable rates so that cities have the technology and know-how to make existing buildings more energy efficient. In exchange, the companies increase their markets. The banks grant the necessary loans, which are paid back through the energy savings.

More than 250 projects cover over 152 million m² of building space in 20 cities worldwide including municipal buildings, schools and universities and the largest public housing stock in North America. In the commercial sector, CCI has initiated retrofit projects in Chicago, New York, Bangkok, Mumbai and Johannesburg. Private owners initiating similar projects include shopping mall owners in India and Korea, the Daley Center in Chicago, and Wien

and Malkin – owners of the Empire State Building, New York.

Cities are not just *saying* they will take the lead in tackling global environmental problems; they are getting results. There are several reasons why cities are keen to stimulate debate and action:

 Cities now face severe environmental degradation and impacts from climate change including: dwindling water

C40 climate leadership group

The C40, started by former London Mayor Ken Livingstone, is a group of 40 large cities with at least 3 million inhabitants from all continents aiming to cut greenhouse gas emissions. A few smaller cities, such as Stockholm and Copenhagen, are also involved. It has now joined forces with the Clinton Climate Initiative, its main objective being to help members kick-start action. Projects include: an integrated solid waste management system in New Delhi (door-to-door collection, transportation, treatment and disposal of waste); a light-emitting diode streetlight project in Los Angeles that will save 40% in energy use; and the introduction of electric vehicles in public and private sector fleets in 12 cities.

Johannesburg, Mexico City, New York, Paris and Seoul are all members. As major cities, their actions clearly matter for global environmental governance. They can take the lead at regional and international levels; they can influence at a national level and encourage worldwide action. They can achieve massive greenhouse gas reductions that will make a huge difference globally. The C40 is political: with Copenhagen and ICLEI it is holding a parallel climate summit for mayors at the UN summit in December 2009, where it will present what cities are doing and ask national governments to engage, empower and provide resources.

supplies, flooding (which destroys settlements), the health consequences of poor air quality and the urban heat island effect (temperatures in cities are expected to be 3.5–4.5°C higher than surrounding rural areas). Solutions need to be found.

- Local green politics often fits well with policies to create jobs, develop infrastructure and improve urban health. Effective communication channels with the local community and businesses will garner public support for environmental programmes.
- The image of being green and sustainable will help boost a city's 'brand', which will attract investment and improve its competitive edge over other cities.

The European Green Capital Award will be given to one city each year for having a good environmental track record and for showing strong commitment to change. Winning the award will boost environmental activities and recognition of the city's leadership. Stockholm will be the first European green capital in 2010.

Does the local affect the global?

Despite these achievements, scholars remain sceptical that cities really will have an impact. Local government action is appreciated: it boosts the spread of best practices and information, it increases competence and brings projects to fruition. All this should help local authorities by pass traditional limitations such as government regulations, low budgets and poor capacity and knowledge to deal with complex problems.

Local initiatives can encourage city-related climate change policies but do they contribute to global solutions? Some scholars remain unconvinced for several reasons:

- the benefits mainly accrue at the local level
- the impact is too small to matter at the global level
- the focus is on relatively easy measures, avoiding radical policy choices
- most initiatives are voluntary.

It is easier for local governments to take the lead if they have support from national governments as well as international recognition. This is why a group of local governments associations (ICLEI, United Cities and Local Governments, World Mayors Council on Climate Change, C40 and Metropolis) is lobbying at the Copenhagen climate change summit in December 2009. The group aims to try and convince the international community that national-local partnerships and strong support for and empowerment of local authorities are required to take global climate change policy beyond 2012.

For global environmental governance to succeed, support is essential for multiple actors at many levels: city, regional, national and transnational. Although city initiatives may seem limited, there is clearly a trend towards local engagement. To achieve significant results, urban areas need to act. The city networks are now in place and are ideal vehicles for coordinating efforts. Recognizing that local really does matter will be critical in tackling global environmental issues. As the C40 put it, 'engage, empower and resource our cities'.



Futuristic concept of a city public transport system.

- Bulkeley, H and Betsill, M. (2003) Cities and Climate Change: Urban Sustainability and Global Environmental Governance. London: Routledge.
- Kern, K. and Bulkeley, H. (2009) Cities, Europeanization and Multi-Level Governance: Governing Climate Change Through Transnational Municipal Networks. *Journal of Common Market Studies* 47 (2): 309-332.
- ☐ Marcotullio, P. and McGranahan, G. (eds.) (2007) Scaling Urban Environmental Challenges: from the Local to the Global and Back. Earthscan: London.

City networks are thriving

The boom in city networks in the last 17 years is attributed to Agenda 21, born out of the Earth summit in Rio de Janeiro in 1992. Chapter 28 recognizes the role of local authorities in promoting sustainable development and recommends encouraging the exchange of knowledge. The communications revolution means that this is far easier and cheaper to do than ever before and it can be done instantaneously on a global scale. City networks are diverse: some are old (Citynet) and some are new (C40 Cities Climate Leadership Group); some are specific (Energie-Cités) or broad (Eurocities) in scope; others may focus on smaller (Sustainable Cities and Towns Campaign) or larger cities (Metropolis); they may have many members (ICLEI) or just a few (Mega-Cities Project) and so on. Yet they have common aims:

- to exchange information, knowledge and best practices
- to increase cities' capacity
- to strengthen cities' voices in the international arena. Most networks also stage events where city officials and mayors can present best practices, learn from each other and build up personal relationships. Several have developed online tools databases, mailing lists or intranet services, for example providing members with information on successful projects and policies or upcoming events. City networks cooperate with international organizations such as UN-Habitat and the World Bank, the private sector (environmental consultants, energy service companies, banks) and NGOs. External actors help cities implement concrete projects by offering knowledge, services or financial support. Some networks represent cities in the international arena, advising the UN and participating in international supports.