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# City Dwellers

The Power of the World's City Dwellers to  
Fight Climate Change

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Zerofootprint is an organization dedicated to a mass reduction in global environmental impact. We provide software and services to individuals, governments, universities, and corporations that measures and manages carbon footprint and engages employees and citizens worldwide in combating climate change.



## **The Power of the World's City Dwellers to Fight Climate Change**

In 1800, when the world's population totalled 1 billion, barely 3 percent of people lived in cities or towns. Most families lived on farms or in villages, with small groups still pursuing nomadic or hunter-gatherer lifestyles. While the global population has multiplied six-fold since then, the proportion of people living in cities has exploded. Now around half, or 3 billion of the world's 6 billion people, live in urban environments.

At the same time, individual cities have grown enormously. Compared with the great cities of history - Athens (population 250-300,000), Heian-kyo (now Kyoto: 100-200,000) or Imperial Rome (1 million) – our modern conurbations are monstrous. Following the decline of Rome, it was not until 1800 that a city, this time London, reached a population of 1 million. Now, Tokyo has a population of 35 million, Greater Mexico City 19.2 million, and Mumbai, São Paulo and New York City each have over 18 million. Meanwhile, over the past 25 years many once modest and obscure cities have seen their populations treble or more. Since 1980, Lagos has grown from 2.6 to 11.1 million and Kabul from one to three million, while the string of small mining towns that sprang up to the east of Johannesburg along the gold reef has coagulated into an urban area now known as Ekurhuleni that houses over 3 million people.

Today, nearly 430 cities have populations of over 1 million. But while countries, with their historical borders and legacy notions of nationality, continue to compete and indulge in confrontation, cities all over the world, with their ever expanding reach and flood of new citizens, know they have much in common. One of the reasons people travel so readily nowadays is that, while appreciating each city's unique characteristics, they know more or less what to expect from one city to another. Cities work in much the same way, and face common issues and challenges.

National governments often become bogged down with foreign policy, security and ideological agendas, whereas city governments are forced to focus on more practical issues. Their citizens elect them to provide services, with planning and development for the future. In



recent years, cities have seized the initiative in a number of areas, developing solutions to problems that have stymied national administrations. The community policing approach of New York City, traffic congestion charging in London, public transport in Curitiba (Brazil), tourism development in Barcelona, and electronic government in Taipei have all become models of how to manage modern challenges.

There is one issue above all that both national and city governments must face today and that is climate change. Where countries fall out over Kyoto and its alternatives, cities are recognising that they can and should act in concert. Although geographical borders divide countries, the common danger of global warming, with its risks of rising sea levels, extreme weather, water and food shortages, etc., is uniting cities to find solutions. Of the 33 cities that are projected to have populations of over 8 million by 2015, 21 are coastal settlements that could be devastated by higher sea levels. Cities know the threat of climate change is global, while their remedies must be local.

Cities have already begun to take cooperative action, often to fill the vacuum of national policy. Since May 2006, with the US Federal Government continuing to reject Kyoto, the mayors of over 300 American cities have signed a climate protection agreement committing themselves to reduce greenhouse gas emissions to seven per cent below 1990 levels by 2012. Among the measures the mayors have agreed to pursue are improved public transport, better pedestrian and cycling facilities, curbs on urban sprawl, and a switch to renewable energy sources. Chicago, for example, plans to increase its renewable energy use to 20 percent by 2010, while Seattle's green commitments amount to a reduction of 638,000 tons of emissions a year.

On an international level, representatives of 40 of the world's largest cities have formed a group called the C40 Cities to collaborate on driving down carbon emissions and sharing ideas on how to work with businesses and national governments to accelerate action on climate change. Beijing, Johannesburg, New York and Paris are among the group, which met in May this year, and which, working with former President Bill Clinton's Climate Initiative, devised a programme to retrofit urban buildings with energy efficiency measures to make savings of up to 50 percent.



Urban areas are responsible for approximately 75 percent of all energy use and greenhouse gas emissions, with buildings accounting for nearly 40 percent. In cities such as New York and London this figure is close to 70 percent.

Mayor of London Ken Livingstone, chair of the C40, said at the launch of the programme: "National governments still struggle to agree a way forward on global warming, but cities, which are responsible for around three quarters of global greenhouse gas emissions, are today demonstrating the leadership and decisive action necessary to prevent catastrophic climate change."

But it is not just city governments that are taking initiatives. All over the world, communities and individuals within cities are taking initiatives to reduce their carbon emissions. From swapping their cars for bicycles, to fitting wind turbines to their roofs, to cultivating urban vegetable gardens, citizens are taking matters into their own hands. While each action may be small, collectively they count. Encouraging such initiatives can build the momentum and increase the aggregate impact of millions of individual actions.

One thing that many city dwellers share is the Internet. While total Internet access is relatively low as a proportion of global population – only around 17 percent – it nevertheless amounts to a huge number of people, over 1 billion, who are heavily concentrated in the cities. Furthermore, access is growing fastest where cities are expanding most rapidly. Since 2000, usage has grown over 600 percent in Africa, over 430 percent in Latin America, and 250 percent in Asia - which has the most users: 400 million in 2007. Because of Internet cafés and other forms of access sharing, usage can grow very much faster than the actual number of new computers and connections. At present, North America has the greatest number of users – 70 percent of its population has Internet access – followed by Australia and New Zealand (53 percent) and Europe (40 percent).

Exploiting this connectedness, and giving people the tools to communicate and collaborate, can engage the collective intelligence of world's cities, creating a new "country without borders" whose citizens can bypass national government gridlock, and start to take real and immediate action for themselves on climate change. Web applications are now available to



enable people of the world's cities to calculate their environmental footprint, and to report on their success in reducing this footprint, sharing ideas, and encouraging and challenging one another to do more.

The power of world's city dwellers to affect change is enormous. Let's be conservative and say that only three quarters of Internet users live in cities – in other words, 750 million people, or one quarter of the global city population. And let's say these 750 million people agree to reduce their carbon emissions by 10 percent. And let's be conservative again and say that individual citizens have control of only one third of the emissions produced by a city. That would still amount to nearly 1 percent of annual global emissions, or 346.5 million tons of carbon – more than six times the amount of carbon saved by Kyoto's Clean Development Mechanism so far.

If you apply the same figures to water use, recycling or buying of locally produced foods you quickly see the difference that the citizens of the global city could have on our environmental impact. We now have the connections and the tools to link this community together to take direct action on their own behalf, and on behalf of the generations to come.

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