



Acknowledgements

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- **Beitbridge Rural District Council, Zimbabwe**
- **Musina Municipality, South Africa**
- **City of Melbourne, Australia**
- **City of Tianjin, P.R. China**
- **Nairobi City Council, Kenya**
- **Shenyang Municipal Government, P.R. China**
- **eThekweni Municipality, South Africa**
- **Municipality of Betim, Brazil**
- **City of Bayamo, Cuba**
- **Aichi Prefecture, Japan**
- **International Centre for Sustainable Cities**
- **Electric Company of Minas Gerais, Brazil**
- **Katholieke Universiteit Leuven, Belgium**
- **United Nations Environment Programme (UNEP)**
- **United Nations Human Settlements Programme (UN-HABITAT)**



Introduction

The world continues to urbanize at an unprecedented pace and this year, for the first time ever, over half of the world's population will be living in cities. While cities consume a major share of the planet's resources and have often been the locus of the planet's most serious environmental problems, they also symbolize a hope for a sustainable future. Indeed, environmental sustainability in this urban millennium can only be achieved through cities' leadership, especially on issues such as climate change, biodiversity conservation or water resource use. Moreover, this challenge cannot be addressed by cities working in isolation. Partnerships between and among local governments, utilities, universities, businesses, non-governmental, community-based, or international organizations are therefore an essential mechanism for turning the abstract idea of collaboration into concrete joint activities. Whether through sister city relationships, twinnings, joint ventures or other cooperative initiatives, local partnerships have played a pioneering role in enhancing community interaction, finding solutions to shared problems, using limited resources more efficiently, and generating economies of scale through city action – thus increasing sustainability worldwide.

This publication profiles 12 examples of local government achievements towards sustainability and the specific partnerships with a variety of actors that have contributed to that success. They include:

- Five cases of local governments partnering with other local governments (the City of Växjö and Bohol Province, the cities of Duluth and Petrozavodsk, Phuket and the City of Greater Sudbury, Beitbridge and Musina, and Melbourne and Tianjin).
- Four cases of local government partnerships with international organizations (United Nations Environment Programme (UNEP) and Nairobi City Council, United Nations Human Settlements Programme (UN-HABITAT) and the Shenyang Municipal Government, ICLEI-Local Governments for Sustainability and six African cities, and the International Centre for Sustainable Cities and eThekweni Municipality).
- Three cases of local governments linking with a range of academic and business partners (the Municipality of Betim and the Electric Company of Minas Gerais, the City of Bayamo and the Katholieke Universiteit Leuven, and Aichi Prefecture and several local partners).

No matter where they are located, partners are inevitably confronted with the challenges of securing sufficient time, human and financial resources, building and retaining capacity, reconciling language or cultural differences, building trust, and overcoming the geographic divide. The 12 cases contained in this publication show that despite the challenges, partnering is indeed a rewarding endeavor.



Beitbridge, Zimbabwe & Musina,

Separated only by the Limpopo River, the communities of Beitbridge (Zimbabwe) and Musina (South Africa) realized that they had many common issues that could be better addressed by working cooperatively. The communities share a common culture and problems such as border crime, enforcement and security, health problems, and water resource management. These issues became the focus of collaboration between the officials from either riverbank.

In 2005 officials in both municipalities realized the potential for accelerated economic development on both sides of the river through greater cooperation and signed a Memorandum of Understanding to establish an official twinning partnership. The twinning arrangement has led to the creation of specialized sub-committees (focused on tourism and conservation; women, children and health; transport, disaster management, safety and security; education, arts, sports, and culture; administration and economic issues; and environment and engineering) that address related issues and make recommendations to a Joint Implementation Committee that consists of senior managers. This committee, in turn, considers proposals from the sub-committees and makes recommendations for

policy implementation to the Joint Coordination Council, a six-member group that includes the highest political representatives of both municipalities.

One of the focus areas of the twinning project has been the management of water resources. The Limpopo River serves as the source of both urban and agricultural water for both municipalities and a discharge area for solid and liquid wastes. Before the twinning, the two



Beitbridge

Population: 104,000 (2002)

Area: 12,697 km²

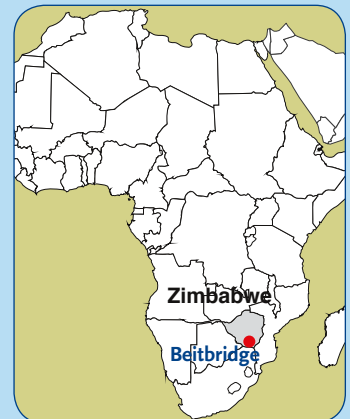
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South Africa

municipalities were using water resources and managing wastewater from the same basin with little or no coordination.

Both municipalities have agreed to implement and use an integrated water resources management approach for the river. The signing of the twinning agreement has increased the level of integration since both local authorities now share information on drinking water abstraction points, pollution points, as well as sampling points. Integrated supply and demand management have also been strengthened. Substantial efforts have been made to reduce water losses, pollution levels, as well as limit water demand. There is also a focus on attempting to restore the river's integrity while optimizing water use within the basin.

Albert Mbedzi, Chief Executive Officer of Beitbridge Rural District Council, explains that the twinning arrangement has led to a “change of attitude and behavior” between staff from the two municipalities. Through visits and staff exchange programs, staff have had a chance to better understand how their counterparts handle various challenges. Through the cooperation between Beitbridge and Musina, the Limpopo River and the communities that depend on it will reap many benefits.



“... the partnership has led to a change of attitude and behavior ...”

Musina

Population: 40,826 (2001)

Area: 110 km²

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Duluth, U.S.A. & Petrozavodsk,

The City of Duluth (U.S.A.) and the City of Petrozavodsk (Russia) established their partnership in 1987 through Sister Cities International, a non-profit twinning organization. The cities share several similarities: both communities are located on lakes in northern climates, are surrounded by forests, and have economies focused on natural resource extraction.

Since 1987, nearly each year a delegation from one of the cities visits the other city to share and exchange information, knowledge, and local traditions. Themes for the exchanges have ranged from music, culture, and health to business development, sports, and water quality. Participants in the visits have included elected officials, municipal staff, journalists, university professors and students, businesspeople, and citizens. The partners are involved in various projects such as annual exchanges, fundraising

projects, and humanitarian assistance work.

In recent years the partnership has integrated sustainable development themes into the exchanges, a new area of activity for both partners. In 2004 Duluth invited Petrozavodsk to join the Cities for Climate Protection Campaign. In 2006 a delegation from Petrozavodsk visited Duluth to focus on water quality issues. Duluth is located on the western shore of Lake Superior and Petrozavodsk is located on Onega Lake. The visit included tours of Duluth's water and sewage treatment plants, a trip on a marine research vessel on Lake Superior and an opportunity to exchange knowledge with city staff on their respective water initiatives.



Duluth

Population: 86,913 (2007)

Area: 226 km²

Municipal budget:

USD 78,001,700 (2007)

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Russia

In October 2007 a delegation from Petrozavodsk visited Duluth to focus on energy management issues. Duluth municipal staff shared their experience in implementing energy efficiency and greenhouse gas emission reduction projects in city facilities and suggested ways that Petrozavodsk can implement similar energy-saving projects.

For many years, the City of Duluth funded its twinning work through hotel and motel taxes collected by the city's tourism department and ran the program out of a city department. The twinning program has recently become a separate, non-profit corporation which will give it more flexibility to pursue other forms of fundraising.

For Duluth, the benefits of the partnership have been a better understanding of another culture, greater economic opportunities, and new activities for local youth. Dan Green, the City of Duluth's Facilities Operations Manager, credits strong community support and involvement in the partnership as one of the secrets of its success. Keeping the local community involved through the media and other publications as well as undertaking outreach activities is crucial to ensuring wide community participation. Mr. Green encourages other municipalities to get involved in partnerships and notes that partnerships are “not just about

offering something, they're also about learning.”

Vera Meshko from Petrozavodsk's External Relations Department explains that involvement in the partnership provides “a cultural insight for both parties. Those participating in the twinning projects find out about the approaches and ways of thinking of their counterparts abroad. Ultimately this brings down barriers which are sometimes created in the field of public politics.”



Petrozavodsk

Population: 266,600 (2002)

Area: 121.8 km²

Municipal budget:

RUB 2,142,000,000 (2006)
(USD 83,000,000)

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Melbourne, Australia & Tianjin,

The City of Melbourne (Australia) established its sister city twinning agreement with Tianjin (China) in 1980 and in 1998 opened a representative office in Tianjin to further facilitate sister city projects and events. In 2005, when Melbourne and Tianjin celebrated their 25th anniversary of sister city relations Tianjin's mayor Dai Xianglong visited Melbourne where he and Melbourne Lord Mayor John So signed a "Declaration of Commitment" to actively collaborate on a number of mutually beneficial environmental activities.

Melbourne

Population: 67,193 (2006)

daytime population :
732,200 (2004)

Area: 36 km²

Municipal budget: AUD 208 million (USD 180, 458, 720) (2005)

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Specifically, the two mayors agreed to "undertake projects that promote the exchange of environmental and urban management strategies to enable Melbourne and Tianjin to take leadership roles in dealing with the complex environmental and community challenges associated with rapid technological and urban development." The City of Melbourne's International Relations Department partnered with the Tianjin Environment Protection Bureau (EPB) to meet the new commitment.

The City of Melbourne facilitated the green building retrofit of an existing office building in Tianjin, which will deliver significant environmental savings while being developed for less than the cost of constructing a new building. A preliminary concept design was completed by an



China

Australian green building team consisting of a consortium of Melbourne-based companies who prepared 10 green building options. The Tianjin EPB selected the greenest option to proceed to the concept design stage. The Australian green building team will be included in the contract specifications of further stages in the project such as review of the detailed design, implementation, commissioning, and monitoring to ensure the building achieves maximum performance and that Australian technologies and products are utilized in the demonstration project.

Melbourne also worked with Tianjin to introduce an environmental management accounting reporting system (or “Green Gross Domestic Product”), which came about as the Chinese central government piloted 10 cities in China to track or measure their GDP against 10 environmental principles. Additional activities have included the hosting of two Tianjin EPB staff for 20 weeks in the ICLEI office in Melbourne where EPB staff were trained on water and energy saving programs. As well, exchange visits of Melbourne and Tianjin staff have taken place.

Tom Parker, the City of Melbourne’s China Projects Officer, explains that the partnership has been effective in “aligning the aspirations of the sister city governments with appropriate partners in each city – namely ICLEI and Tianjin EPB.” Both partners have gained from the partnership, he

added, since “the City of Melbourne benefited from being involved through profiling the city’s environmental skills internationally and Tianjin benefited from being exposed to world-class thinking on energy efficiency.”



Tianjin

Population: 9.5 million

Area: 11,300 km²

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Phuket, Thailand & Sudbury, Can

Despite differences in climate, culture, and language, Phuket (Thailand) and the City of Greater Sudbury (Canada) both have a keen interest in moving towards sustainable development. Phuket and Sudbury were matched as part of a Canadian International Development Agency (CIDA)-funded twinning program. The establishment of the partnership in 2005 allowed staff from both municipalities to share best practices in the areas of strategic energy planning, recycling, and disaster response and risk reduction.

In 2005 two Phuket municipal staff travelled to Sudbury to learn

about the city's initiatives related to sustainable development. Sudbury municipal staff shared their experiences with strategic energy planning and took Phuket staff on a tour of city facilities that had been retrofitted to save energy (including a solar wall, geothermal heat pumps, and a co-generation facility at a local hospital). Phuket was very interested in Sudbury's experience with geothermal energy and the possibility for its use in Phuket.

Rubber production is the major industry in Phuket, and Phuket staff were therefore particularly interested in tire recycling initiatives that Sudbury has undertaken. Additionally, both Sudbury and Phuket have had similar histories where mining had been an important part of their local economies. Sudbury explained how it has put its former mines to use for educational and economic gain, and Phuket



Phuket

Population: 75,444 (2007)

Land area: 12 km²

Municipal budget:

THB 400,471,567

(USD 12,517,662) (2007)

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representatives expressed interest in developing a similar education center in their former mines.

Since the visit occurred several months after the 2004 Indian Ocean Tsunami, which directly affected the City of Phuket, emergency planning and disaster risk reduction initiatives were of keen interest to both cities. Phuket highlighted the importance of mangrove forests in protecting its shoreline from tsunami damage. Since Phuket only has an emergency response plan in place for its hospital, Sudbury offered to share its experience in emergency response planning with Phuket.

Although due to funding constraints the partnership did not translate into concrete activities since the visit, both partners are interested in exploring other potential areas of collaboration such as public health, education and ecotourism. Both partners hope to find another way to continue their partnership.



Based on her experience with the partnership, Dr. Tasanee Aikvanich, from the City of Phuket, comments that “sharing mutual interests and exchanging best practices between cities will prolong a partnership.” Barb McDougall-Murdoch from the City of Greater Sudbury emphasizes that creating an opportunity for partners to visit each other’s communities is an invaluable way to “forge long-term partnerships.”



City of Greater Sudbury

Population: 157,857 (2006)

Area: 3,627 km²

Municipal budget:

CAD \$ 479,430,745

(USD 467,714,497) (2007)

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Växjö, Sweden & Bohol, the Philip

The Municipality of Växjö (Sweden) has a long history of environmental action dating back to the 1970s. In 2001 Växjö joined a European pilot project to test and develop an environmental management system called *ecoBUDGET*. Designed specifically for local governments, *ecoBUDGET* complements the traditional accounting system by planning, controlling,

monitoring, reporting on, and evaluating the consumption of natural resources within the geographical area of

a municipality. When the project came to an end in 2003 several of the European participants decided to undertake a new project to implement *ecoBUDGET* in developing country cities. Växjö had had a positive experience introducing *ecoBUDGET* into its municipal administration but since it was still in the early stages it wanted to get support and inspiration from working in partnership with other cities. In 2005, the *ecoBUDGET* Asia project began with four participating cities. Växjö was partnered with the Province of Bohol (Philippines), which planned to implement *ecoBUDGET* in the Municipality of Tubigon.

Despite vastly different geographical, economic and cultural realities, Växjö and Bohol municipal staff soon realized that they were both facing similar challenges in the area of solid waste, water, and energy, but needed different solutions.



Växjö

Population: 78,473 (2006)

Land area: 1,674 km²

Municipal budget: SEK 2.9 billion (USD 418,066,227) (2006)

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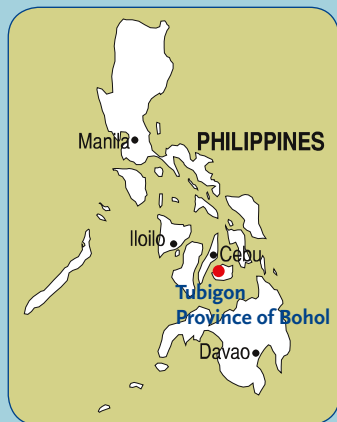
Website: www.vaxjo.se/english



As part of their partnership the cities have attended project workshops and undertaken field visits to both cities where they have been able to share experiences, exchange ideas and meet with citizens. Technical staff and elected officials from both cities have been most directly involved in the partnership.

Through the partnership Växjö has shared its technical expertise (such as analyzing the chemical composition of water) with Bohol. Växjö has also shared its experiences in selecting measures, setting targets, and implementing measures as part of the *ecoBUDGET* cycle.

Although Växjö has completed six *ecoBUDGET* cycles, city staff have still been able to learn a great deal from the partnership with Bohol. According to Anders Franzén of Växjö's Executive Office, "Bohol simplifies the system in a good way" and by looking at *ecoBUDGET* through Bohol's eyes, "Växjö can see something new." Växjö was impressed at how effectively Bohol involved its citizens in the *ecoBUDGETING* process. Franzén also noted that the partnership provided an excellent opportunity for staff to realize that "there are sometimes better ways of doing things."



Although the great distance between Växjö and Bohol is a challenge, representatives stay in close contact via email. Both cities have developed a close working relationship and would like to continue to share their knowledge and experience with other cities by participating in another *ecoBUDGET* implementation project.



Tubigon

Population: 40,385 (2000)

Land area: 82 km²

Municipal budget: PHP 71,148,600
(USD1,489,47) (2007)

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Aichi Prefecture, Japan & the Aichi Zero

Aichi Prefecture is one of the most industrialized regions in Japan and is primarily focused on the automobile industry. After intense growth in the 1970s, Aichi Prefecture began facing a variety of environmental problems and started exploring partnerships with industry and academia in order to find solutions. All partners shared common goals of the effective use of materials and zero emission of waste in the region. More recently, successful collaboration during World Expo 2005 in Aichi and the construction of the Central Japan International Airport (where efforts were made to minimize the environmental impact during

the airport's

construction and operation) created momentum that led to the establishment of the Aichi Zero Emission Promotion Center (AZEPC) in May 2006.

The AZEPC is a hub for academia, business, and local government that aims to achieve zero emission of waste and promote the efficient use of resources in industrial operations. The center investigates and develops opportunities for recycling-oriented business and provides support to new business projects at each stage of the development process.

New businesses in Aichi must meet three criteria: effective reduction of environmental impacts, business sustainability and profitability, and technological innovation. At the AZEPC, universities provide support to new businesses to help them reduce their environmental burden; established businesses advise on sustainability and profitability; and Aichi Prefecture supports new business development by facilitating the new business approval and licensing process.



Aichi Prefecture

Population: 7,341,225 (2007)

Area: 5,161 km²

Municipal budget: JPY 2,245,018 million (USD 19 billion) (2007)

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Zero Emission Promotion Center

The key partners at the center include the Aichi Prefectural Government, Environmental Partnership Organization Club, the Nagoya Industrial Science Research Institute, Nagoya University, and Toyohashi University of Technology. The center was established and is managed through an industrial waste tax levied by the prefectural government. Staff at the AZEPC include four prefectural government staff, three business experts, and 20 researchers.

Services offered by the center include consultancy and support to new businesses to encourage resource recycling; the development of an online information service; the preparation of material flow analyses; a recycling resource database (to link companies that create waste through their industrial processes with companies that can recycle it); the Environmental Award of Aichi; and the provision of grant money for feasibility studies and innovative facility construction projects.

Since the center's opening 11 industrial facilities in Aichi Prefecture have initiated recycling programs, including a steel plant that now recycles more than 80% of the nickel waste emitted in sewage and dust.



There have also been multiple benefits for the partners involved in the AZEPC: greater business opportunities have opened up for industry; universities have been able to put their knowledge into practice; and the prefectural government has been able to reduce industrial waste, promote the local economy, and build its reputation as a high-technology region.

According to Tomohiro Aoyama of Aichi Prefecture's Recycling and Waste Management Division, the key to a successful partnership is to "understand the needs of each partner and search for the best method of partnership considering [each partner's] needs."



Bayamo, Cuba & Katholieke Univer

The Postgraduate Center on Human Settlements is an academic center in the Department of Architecture, Urbanism and Planning of the Faculty of Engineering at the Katholieke Universiteit Leuven (KUL). Since the Center places great importance on linking theory and practice, for over 20 years its students and staff have been conducting research and undertaking project work in various countries around the world.



In 2001 the Center joined several other partners in working with the Municipality of Bayamo in Cuba to undertake a Local Agenda 21 (LA21) sustainable urban development process. The goal of the project was to improve local planning and management capacities in order to better address the urban environmental challenges faced by this provincial city. The specific role of KUL within the broader project facilitated and financed by the Physical Planning Institute (Instituto de Planificación Física) and the United Nations Human Settlements Programme (UN-HABITAT) was to contribute to a better understanding of the physical planning implications of environmental issues.

Bayamo

Population: 225,126 (2006)

Area: 918 km²

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As part of the project a LA21 team was formed and an Urban Environmental Diagnostic was undertaken in 2002, which identified and described possible problems that could be addressed during the LA21 project. Four priority issues were selected and approved by the municipal council: river degradation, waste management, urban mobility, public spaces and services. In 2003 an “Urban Consultation” – a workshop involving over 200



CUBA

ersiteit Leuven, Belgium

stakeholders – was held to discuss technical and institutional issues related to the four priority areas. Participants signed an Urban Pact committing themselves to developing concrete measures to address the four priority problems identified in the Urban Environmental Diagnostic. Working groups were then set up to develop measures and suggestions for pilot projects.

KUL staff and students contributed to the project by conducting fieldwork, undertaking research, and providing selective inputs to the Urban Consultations and the working groups. Through an agreement with the Physical Planning Institute, ten students undertook field internships and wrote graduate theses focused on the city's major planning and environmental issues. The urban development scenarios they proposed were later presented to municipal officials as a source of inspiration. The presence of the students also served to open the minds of municipal officials as the students put Bayamo in touch with other cities around the world to share experiences with LA21 processes and other ways of conducting projects.

According to Luis V. Canut Cedeño of the Province of Granma's Physical Planning Office, one of the benefits of the partnership was “obtaining new proposals for solutions to problems through the graduate theses undertaken [by the students] as well as getting access to up-to-date information about urban processes and management.”

KUL Professor Han Verschure explains that an essential requirement of any partnership is “100% openness” among the partners and preparedness to communicate, exchange ideas, and “co-learn.”



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Betim, Brazil and CEMIG

Since 2003 the Municipality of Betim (Brazil) and the electrical energy utility of the state of Minas Gerais (Companhia Energética de Minas Gerais or CEMIG) have partnered on a project to install solar water heaters in low-income housing built by the municipality. Both partners had numerous reasons to work together:

Betim

Population: 410,000 (2006)

Area: 358 km²

Municipal budget:

BRL 794,900,000 (2007)

(USD 485,857,000)

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- The Municipality of Betim, through its municipal housing department, builds low-income housing for residents;
- CEMIG seeks to increase energy efficiency and also reduce peak electricity demand in order to postpone investments in its overloaded electrical grid and is also required by Brazilian law to spend 0.5% of its revenues on energy efficiency projects; and
- Both partners are committed to reducing greenhouse gas emissions and undertaking projects related to sustainable development.

As a result, the municipality and the utility company developed a partnership where CEMIG provides and installs solar water heaters in municipal housing units. CEMIG paid for the installation of the solar water heaters and the Municipality is responsible for providing support to the residents on any issues they have with the equipment after its installation.



The goals of the partnership are to increase energy efficiency and reduce peak demand; create conditions that lead to a multiplier effect in other municipal housing units, provide an opportunity for CEMIG to undertake social responsibility actions, disseminate new forms of renewable energy, and stimulate the market for solar water heating in the state of Minas Gerais.

So far the partnership has resulted in the installation of 1026 solar water heaters. In these households electricity consumption has declined by approximately 52 kWh per month, which represents an average saving of 40% of clients' total energy consumption. Other benefits include increased awareness of renewable energy sources among citizens and the stimulation of the solar water heating market in Minas Gerais.

The state of Minas Gerais is today one of the largest users of solar water heating systems in Brazil and Betim is currently the city with the greatest number of such installations.

The partners have found solutions to several challenges in the project: when some residents initially sold their solar water heaters for financial gain, municipal social workers undertook awareness raising activities to explain the economic benefits of the heaters and began requiring residents to make a signed commitment to participating in the program and not selling their equipment.

According to Nelson Fonseca Leite, Regional Superintendent of Central Distribution at CEMIG, the partnership has worked well because “both partners have the same way of thinking.”

Bitiá Almeida, Manager of Betim's Reference Center on Renewable Energies, explains that “a good result from a partnership is possible when the partners have similar interests and the political will of a municipality is directed towards investments that bring a good return for citizens and the environment.” The partners plan to continue collaborating on additional energy efficiency projects.



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Durban (eThekweni), South Africa

Durban (South Africa) and the International Centre for Sustainable Cities (ICSC) in Vancouver (Canada) both have their sights fixed on the future. As a member of ICSC's PLUS Network, Durban and ICSC are collaborating to develop a long-term urban sustainability plan for the community. In contrast to traditional municipal plans that focus on a 10- or 20-year planning horizon, members of the PLUS Network look at the long-term by developing 50- to 100-year visions with 30-year strategies and five-year implementation plans.

With its established local government system, well-trained administration, solid infrastructure, and keen interest in long-term planning for sustainability, Durban was a natural choice to be one of three African cities to participate in ICSC's three-year project, which began in 2006. While ICSC provides technical and methodological assistance along with a peer support network, Durban contributes financial and human resources and shares its experiences with its peers in Africa and around the world.



Durban (eThekweni)

Population: 3.2 million (2007)

Area: 2,292km²

Municipal budget: ZAR 17.14 billion (USD 2.4 billion) (2007)

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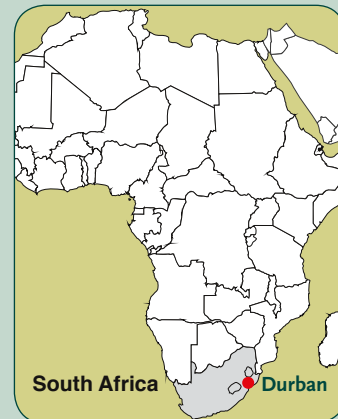
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ICSC is a “do-tank” that shares its knowledge through demonstration projects, peer exchanges, conferences, and by providing consultants from one city to another as an avenue to share expertise in planning for long-term urban sustainability.

Inspired by a consultation process undertaken by PLUS Network member Calgary (Canada), Durban consulted with Calgary municipal staff in order to adapt the consultative process for use in Durban. *Imagine Durban* is described by the municipality as a “council-led,



community-driven project to unlock the imagination of the people, take an integrated long-term look at the city, agree on where we want to be and create a path to take us there.” The project includes several phases: public consultation in order to create a broadly-accepted, long-term common understanding for a future Durban; filtering and analysis of responses; setting goals and targets; identifying strategies and programs; developing a clear and effective long-term action plan; and implementing the plan. Through the *Imagine Durban* project it is hoped that citizens, organizations, institutions, and businesses will become engaged, educated and empowered to think and act more sustainably to ensure a more sustainable Durban for the future.

The project is driven by a project team of 12 municipal staff that works with a multi-stakeholder steering committee composed of elected officials, academics, businesspeople, community members, and representatives from non-governmental organizations and faith-based groups. ICSC hired a Local Project Officer to run the project and act as a liaison between ICSC and the municipality. Sogen Moodley, Senior City Planner with eThekweni Municipality, highly values having a liaison in place as part of the partnership. He notes that “the Local Project Officer is fully integrated in the project, without the bureaucratic constraints of being in the municipal employ on the one hand and without any conditions imposed from the ICSC side.”

Lama Mugabo, a Senior Associate at ICSC, explains that ICSC places great importance on peer learning. He emphasizes that “you don’t need to reinvent the wheel – it is very useful to look at other cities’ experiences as long as you adjust them for the local context. It is not enough to say ‘this worked in city x, so it will work in city y.’ ” Moodley adds that “the greatest benefit [of the partnership] is having the neutrality of an external international NGO working in partnership with the City. Our *Imagine Durban* initiative gains great credibility and legitimacy as it is not just another city-driven project.”



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Providing affordable access to water and sanitation is a challenge facing many local governments around the world, particularly in Africa. The focus of the partnership between ICLEI's Africa Secretariat and six African cities is to increase the capacity of the local governments in integrated governance and management of water and sanitation.

Since the partnership began in 2005, ICLEI's Africa Secretariat has been working closely with elected officials and municipal staff in four Zambian and two Ugandan cities providing training and

technical assistance, and sharing its experience in water management. The ICLEI Water Campaign, active in several world regions, involves local governments' working through a performance-based five-milestone process. During this process, cities form Water Management Committees (consisting of elected officials and municipal staff) and undertake inventories of their water consumption, conservation, and quality. Workshops are held so that stakeholders in the community can openly discuss the findings and share case studies on how they have tackled certain issues on water and sanitation management including those cases where communities have taken a lead in the implementation of such initiatives. After the workshops, the Water Management Committee sets goals for water conservation and quality, develops and implements a local action plan, and monitors progress.

Entebbe

Population: 55,086 (2002)

Area: 53.6 km²

Municipal budget: UGX 4.3 billion (USD 2.5 million) (2007)

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Lusaka

Population: 1,391,329 (2000)

Area: 360 km²

Municipal budget: ZMK 62 billion (USD 15.8 million) (2007)

(continued next page)



Luanda, Angola; Lusaka, Zambia; Jinja, Uganda

The participating cities bring their unique water and sanitation challenges and varying experience with integrated water resources management to the partnership. By working closely with ICLEI, the cities help ICLEI to broaden its knowledge and fine-tune its technical assistance to other African cities. As well, the partnership provides an excellent opportunity for the six cities to share their experiences and good practices.

Bornwell Luanga, Director of Engineering Services in Lusaka, one of the participating cities, explains how the partnership has benefited Lusaka City Council: “the knowledge gained has helped us reduce water bills, making it possible for us to channel resources to other needy service areas. It has also made us take water resource management seriously. We have also increased the capacity of our community to manage water in a sustainable manner.”

Semakula Samson, Entebbe’s Municipal Environment Officer, points out that “there are always ideas that can be exchanged among partnering groups even when you are operating at varying scales.”

According to Gibson Gidudu from Jinja’s Municipal Council, participating in the partnership “... has helped us to bring together key stakeholders by working in harmony and owning the project collectively.” He adds that his Council has learned “that without other partners, the problems of water-related infections including diseases pertaining to poor sanitation cannot be eradicated.”

The Water Programme Manager at ICLEI’s Africa Secretariat, Rapule Pule, notes that the stakeholders’ workshops have served as a unique opportunity for cities to establish formal to semi-formal partnerships between councils and water utilities, and engage in developing targets and action plans to address the gaps in the way they have been governing water and sanitation issues.



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Jinja

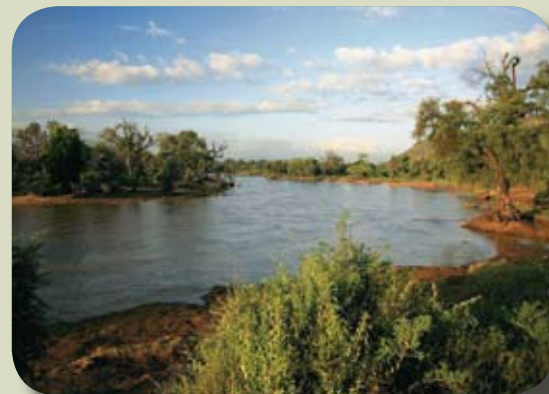
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Nairobi, Kenya & UNEP

In recent years, Nairobi's rivers have become increasingly polluted with solid and liquid waste from a variety of sources. Uncollected garbage, human waste from informal settlements, industrial waste, agricultural run-off and overflowing sewers have resulted in the spread of water-borne diseases, reduced availability and access to safe potable water, loss of biodiversity and sustainable livelihoods, and contamination from toxic substances. With many sources contributing to the problem, a multi-stakeholder partnership approach was necessary to find a solution.



The Nairobi River Basin Programme was launched in 1999 by the United Nations Environment Programme (UNEP) in conjunction with several other partners: the Government of Kenya, UN-HABITAT, the United Nations

Development Programme, Nairobi City Council, the private sector, and civil society. The aim of the programme was to “rehabilitate, restore, and manage the Nairobi River ecosystem in order to provide improved livelihoods especially for the poor, enhanced biodiversity, and a sustainable supply of water for domestic, industrial, recreational, and emergency uses.” The programme consisted of three phases: an assessment phase, a pilot project phase, and an implementation phase.

Key project activities included assessing water quality, establishing an environmental management information system, piloting a pollution monitoring and assessment project in a tributary of the Nairobi River, rehabilitating and restor-

Nairobi City Council

Population: 3 million

Area: 150 km²

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ing the Nairobi Dam, developing and operationalizing water quality and quantity measuring protocols, and undertaking public awareness and community education campaigns to build capacity among local stakeholders.

Nairobi City Council has had an important role as a partner in the Nairobi River Basin Programme. In many instances the Council has played an enabling role by formulating and implementing by-laws that assist with the implementation of the goals of the Nairobi River Basin Programme, providing information (such as statistical data and historical information), and undertaking remedial actions such as tree planting programs. The Directors of the Departments of Environment and City Planning, along with the Mayor and Town Clerk have worked closely with UNEP through the various stages of the programme.

Henry Ndede, UNEP's Coordinator of the Nairobi River Basin Programme, notes that with many issues competing for the Council's attention, it is a challenge to convince the Council to prioritize environmental issues. He emphasizes that trust is a key element of any partnership and feels that "the intervention of UN agencies promotes cooperation among different stakeholders." Ndede acknowledges that since the Nairobi River has been continually polluted for 40 years, the situation can't be fixed overnight. But, he adds, "I think we're moving in the right direction."

“With many sources contributing to the problem, a multi-stakeholder partnership is necessary to find a solution”



United Nations Environment Programme (UNEP)

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Shenyang, China & UN-HABITAT

Shenyang is the economic, cultural, commercial, industrial, and transportation center of northeastern China but it was once considered by the World Health Organization (WHO) to have one of the most polluted airsheds in the world. Through a partnership with the United Nations Human Settlements Programme (UN-HABITAT), Shenyang was able to make significant steps in improving its environment and the quality of life of its citizens. In 1997 Shenyang Municipal Government began the Sustainable Shenyang Project, making it one of 15 global demonstration cities working with UN-HABITAT, UNEP, the United Nations Development Programme, and other partners to increase the sustainability of cities worldwide. With technical support and advice from UN-HABITAT, Shenyang's political administration, municipal organizations, and citizens undertook a step-by-step sustainability process. Beginning with the Shenyang Environmental Profile where the current state of the environment was assessed, three priority issues – air pollution, water pollution, and solid waste management – were identified. A multi-stakeholder,

participatory city consultation was held where participants agreed on the three priorities and strategies to address them as well as the allocation of responsibility to implement the strategies. Working groups developed action plans and pilot projects were carried out to address the priority areas. Over time, Shenyang succeeded in significantly reducing its air and water pollution, and solid waste, as well as increasing citizens' environmental awareness.

Via the partnership UN-HABITAT responded to the needs of Shenyang Municipal Government by providing tech-



Shenyang

Population: 7,200,000 (2006)

Area: 12,980 km²

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nical support in areas such as cross-sectoral coordination, decentralized decision-making, participatory planning and management tools, the development of sustainable development strategies and action plans, and the use of the media to raise public awareness. As well, UN-HABITAT was able to provide Shenyang with greater exposure to international good practices through city-to-city exchanges with other demonstration cities and study tours to learn about innovative approaches and sustainable development thinking. Chris Radford of UN-HABITAT explains that local government officials in Shenyang were “genuinely concerned that the city was in the top 10 WHO worst polluted airsheds in the world, and wanted to make a difference. This political support was a key driver for the success of the project.” Zhang Fan of Shenyang’s Environmental Protection Bureau underlines that in a successful partnership “partners should ... implement all kinds of co-operation by using a flexible, pragmatic, and responsive approach.” Zhang adds that “the achievement of a single project is not enough to further the development of cities. It must be regarded as a long-term job. Partners need to make ... unremitting efforts.” Radford notes that as a result of UN support, Shenyang Municipal Government “gave more respect, resources, and enforcement capacity to its Environmental Protection Bureau, empowering and enabling it to implement the strategies and action plans prepared through the participatory process.” The bureau gradually moved from an enforcement role to that of a negotiating agency, facilitating up-pipe industrial investment and recapitalization programs, providing access to cleaner production technologies, and creating linkages to foreign direct investment. He adds that “overall, Shenyang Municipal Government has been a very responsive partner, and is currently playing an important role sharing its experiences with other cities in China. Shenyang is a keen change agent.”



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Conclusion

Cities are home to over half of the world's population and are a fundamental piece of the environmental puzzle, both as a source of challenges and increasingly opportunities. These opportunities cannot be adequately seized by individual cities, but rather through partnerships of one or more cities working together to increase awareness and come to effective solutions for sustainability.

While it is clear that no predefined formula exists for a successful partnership, the case studies outlined in this publication illustrate the variety of possible approaches to establishing partnerships. As in the case of the cities of Phuket and Greater Sudbury, frequently partnerships are established as part of a specific project with a goal of achieving mutual benefits. Another impetus, as with Petrozavodsk and Duluth, is a sister city or twinning relationship, where two local governments establish an official cooperative relationship to promote cultural understanding and to stimulate economic development. In other cases, as with Beitbridge and Musina, partnerships are established based on practical reasons, such as geographical proximity. In addition, as the Växjö and Bohol example shows, partnerships are often created to advance common economic, social, or environmental goals.

North-South partnerships offer potential advantages over other modes of development cooperation as they enhance possibilities for organizational learning and capacity building. Similarly, South-South partnerships provide valuable opportunities for knowledge exchange and identifying practical solutions to similar problems faced by local governments in developing countries.

No matter where they are located, partners are inevitably confronted with the challenges of securing sufficient time, human and financial resources, building and retaining capacity, reconciling language or cultural differences, building trust, and overcoming the geographic divide. The 12 cases contained in this publication show that despite the challenges, partnering is indeed a rewarding endeavor.



There is no single recipe for a successful partnership; it is clear, however, that successful partnerships do not occur by chance, but rather through the sharing of a common vision, a willingness to engage in a meaningful way, and an unwavering commitment to work together.

A partnership can only be effective if there is a genuine desire among all stakeholders to establish this type of cooperation and there is agreement between the partners on its purpose and scope. Other key ingredients of success are the political will at the highest level of the municipal administration, support from the local community, openness of partners to working and learning from each other, frequent and open communication between partners, and meaningful involvement of stakeholders. Once this is accomplished, partners can apply innovative approaches appropriate to their local circumstances.

The partnerships profiled in this publication have resulted in a variety of outcomes: greater understanding of different cultures and global issues; access and exposure to up-to-date information and experiences; budgetary and financial benefits; stronger connections and peer support networks; greater legitimacy and credibility for the partners' work; and increased knowledge of new tools, approaches, ideas and solutions to advance sustainable development worldwide.

The very definition of a partnership suggests that partners are committed to sharing both the benefits and risks of their undertaking. It is our hope that this publication will assist local governments around the globe in pursuing partnerships that will avoid pitfalls and deliver real positive change for the planet and its citizens.

***“Coming together is a beginning.
Staying together is progress.
Working together is success.”***





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UNEP is the voice of the environment within the United Nations system.

In the field of the urban environment, UNEP supports national and local governments to address key urban environmental issues with a focus on issues that have both a local and an international dimension. These include air pollution, coastal areas, waste, biodiversity, and climate change. In cooperation with partners, UNEP assists national and local governments by providing awareness raising materials, organizing workshops

and trainings, developing tools and involving cities in international meetings.



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Through the Partnership for Clean Fuels and Vehicles, UNEP has been coordinating programmes that aim at reducing vehicular emissions in developing countries to improve urban air quality. UNEP has also launched a Campaign on Cities and Biodiversity to engage local governments in managing and protecting biodiversity and involve them in the global biodiversity debate. Under its new Campaign on Cities and Climate Change, UNEP seeks to engage cities in the global climate debate and assist them in reducing greenhouse gas emissions.

UN-HABITAT – Shelter for all

The United Nations Human Settlements Programme, UN-HABITAT, is the United Nations agency for human settlements. It is mandated by the UN General Assembly to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all. In the field of the urban environment,



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UN-HABITAT supports local and national governments through the Sustainable Cities Programme and Localising Agenda 21 Programme to address key urban environmental issues. As part of the UN-HABITAT-led initiative “Local Capacities for Global Agendas”, established as one of the partnership implementation commitments of the World Summit on Sustainable Development (WSSD), UN-HABITAT works to integrate local level perspectives into global policies such as those on biodiversity and climate change. On the latter, UN-HABITAT is providing multisec-

toral support to local authorities to mitigate and adapt to climate change, with a particular focus on urban planning.

ICLEI

ICLEI – Local Governments for Sustainability is an international association of local governments and national and regional local government organizations that have made a commitment to sustainable development. More than 700 cities, towns, counties, and their associations worldwide comprise ICLEI’s growing membership. ICLEI works with these and hundreds of other local governments through international performance-based, results-oriented campaigns and programs.

Using participatory sustainable development planning approaches, ICLEI aims to assist local authorities to move beyond general sustainable development planning and to apply this approach in tackling areas of priority concern.

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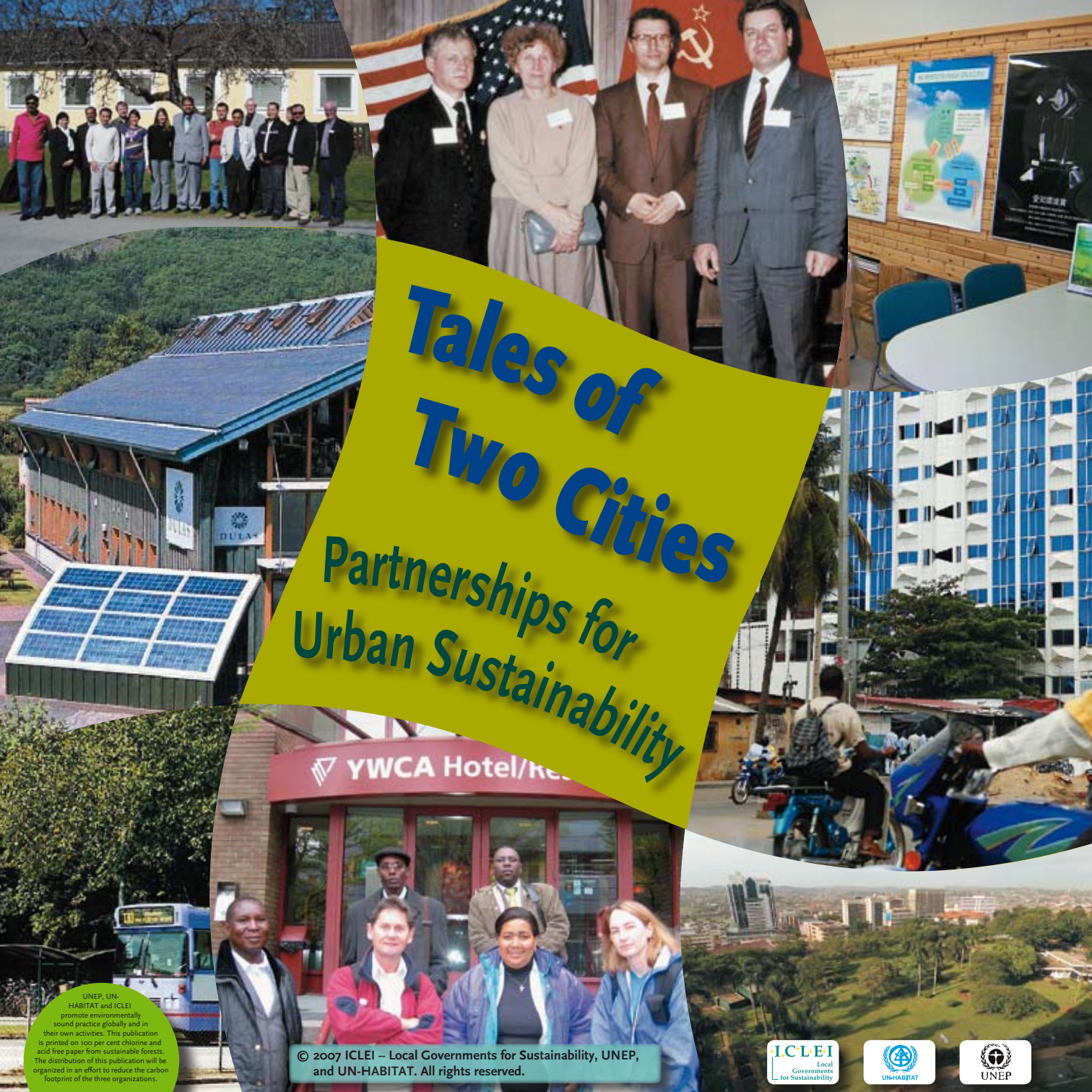
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Tales of Two Cities

Partnerships for Urban Sustainability

UNEP, UN-HABITAT and ICLEI promote environmentally sound practice globally and in their own activities. This publication is printed on 100 per cent chlorine and acid free paper from sustainable forests. The distribution of this publication will be organized in an effort to reduce the carbon footprint of the three organizations.

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