URBAN ECOLOGY

USA • FRANCESCA LYMAN

SMART GROWTH

A report on the US cities that are neck-and-neck in the race to be green.

ARS THUNDER ALONG the skyline on Seattle's grimy, double-decker Alaskan Way Viaduct, as Kathy Fletcher, director of People for Puget Sound, throws open the windows of her office. Beyond the wind-tunnelling roar of the traffic, there's a startling view of the Olympic Mountains sparkling along the western horizon.

"We're down here in the belly of the beast," she chuckles, her gravelly voice drowned out by eight lanes of traffic. With that backdrop, she tells a story that shatters the fairy-tale, ferry boat image of the 'Emerald City'— a story of container-ship pollution and of fragile aquatic ecosystems brought to the brink of collapse by generations of dumping and storm-water run-off.

Despite all obstacles, Fletcher says, Seattle hopes to reclaim and rebuild the industrial corridor along its waterfront into a contemporary greensward that will bring nature back into the city while diverting traffic and creating inviting public space.

"We used to think, 'Here is the city, and over there is the environment,'" says Fletcher. "But the salmon teach us that a healthy environment needs to be protected every step of the way. Salmon can't hatch in a pristine environment and find their way to the oceans if there's nowhere to go in between."

In Seattle, the symbol of the salmon brings citizens together. For inspiration, Seattle's urban designers look north to Vancouver, with its miles of city waterfront, and south to Portland, with its urban greenways and trails. But the quest for urban sustainability seems to be reaching cities big, mid-sized and small, from Chicago to Seattle to Pittsburgh. And the notion of reclaiming cities from their most destructive elements - cars, traffic, and dirty industries - while preserving the best things about them, like waterfronts, vistas and vital street life, animates the growing US urban ecology movement.

ATTHETURN of the twentieth century the City Beautiful movement inspired urban beautification schemes in architecture, landscaping and city planning. Today's city managers and citizens are turning their energies to rebuilding parks, encouraging ecologically sound construction, and giving the go-ahead to environmental engineering of streets, roofs and infrastructure to capture and filter run-off water and protect streams and habitat.

Ten years ago the word 'eco-city' was hardly in currency. But from Seattle to New York to Portland, and even Los Angeles, dozens of cities are vying for the title of 'the greenest city' in the USA. And in every US city, green building is pushing the construction industry towards more energy- and resource-efficiency. The building industry, according to some studies, uses half the total energy the US expends as a nation - even more than the fuel burned by cars and trucks. At the same time, construction demolition and disposal generates a quarter of all the waste in US landfills.

Now cities compete to be certified with the highest number of green buildings. "City authorities see it as a driver for economic development," says Lynne Barker of Seattle's planning department, who is a member of the US Green Building Council (USGBC), a non-profit organisation based in Washington, DC.

In the five years since USGBC created its self-certifying rating system, LEED (Leadership in Energy and Environmental Design), there has been a marked increase in its use. The LEED system allows building owners to accumulate credits for green design strategies they use, earning such ratings as silver, gold and platinum. "Now 6% of all new construction is embracing LEED," says Barker.

Most US cities, of course, like Seattle, have a difficult starting point for growing and greening at the same time: scarce green space and parks, high traffic congestion, degraded land (brownfields), high levels of air and water pollution, and the urban 'sprawl' that is the hallmark of low-density suburban planning. These barriers, however, haven't stopped the most ardent urban activists from believing in preserving the best things about cities while cleaning up the worst.

Take Pittsburgh, once the US's iconic centre for steel, iron and glass manufacturing. It is still a city stricken with particle soot pollution, which wafts up from diesel truck exhaust on its many highways and eastward from Midwestern coal-fired plants. Yet, as the city's industrial base has changed, the skies of the 'Smoky City' have become clearer and its famous rivers clean enough to host a national bass-fishing event.

Here, too, the new David L. Lawrence Convention Center, built on a former brownfield site, has become a prime example of environmentally sound construction. Its gracefully angled roof harnesses wind currents off the Allegheny River for building ventilation.

Although hundreds of old brownfield sites still litter the US landscape, federal policies during the last decade have encouraged their redevelopment. For example,

- Chicago recently built a twentyfour-acre urban park, Millennium Park, on an old railroad right of way that separated the city's famous Michigan Avenue from its lakefront;
- in Los Angeles, neighbourhood activists rallied to turn the Chinatown Cornfield, a former rail yard, into a state park instead of a forty-acre warehouse; and
- Chicago's Center for Green Technology, built on the site of an illegal garbage dump, is now home to organisations and businesses committed to the environment.



Green planter downspout on the 81 Vine building. Downspout designed by Buster Simpson, part of the Growing Vine Street Concept. PHOTOGRAPH: LIZ MARTINI

IF CITY BUILDINGS, their materials, their land and lakefronts can be reused, recovered and restored, so too can the nuts and bolts of cities – their streets and infrastructure.

Portland and Seattle are pioneering 'green streets', which refer to streets engineered with more street trees, landscaped bioswales (designed to remove silt and contamination from surface run-off water) and special pollution-reducing paving materials. A Seattle Green Factor ordinance, based on several European models, took effect in late 2006 and will increase vegetation in Seattle's cityscapes by a factor of six.

While there's been more interest in greening the city, there's also a growing interest in saving green spaces outside of the city. They are, in fact, two sides of the same coin, says Tom Hauser, a planner with the city of Seattle. His city has followed a long-range regional growth management strategy of steering development away from rural, 'resource' land, and instead into existing older neighbourhoods.

Across the USA advocates of 'smart growth' have promoted channelling growth into compact centres with higher densities and more mixed uses, to create better access between homes and shops and places of work. In Seattle, says Hauser, "these densities contribute to higher security through more 'eyes on the street', more active and diverse neighbourhoods, and an 'urban village' feel."

US cities are revamping their urban cores not just for aesthetic or environmental reasons but to cope with new demographic and economic demands. An ageing population is moving out of suburbia back to city centres. 'Empty nesters' and young professionals are moving back into cities at record rates. For the first time since the Second World War, realestate market trends show people choosing to live in city centres, especially 'hot' urban development spots like Chicago, San Francisco, Boston, Denver and Seattle.

BACK ON THE Seattle waterfront, citizens have flocked to design charrettes to discuss plans for the waterfront as well as the nearby sculpture park. One visionary plan would remove sea walls along the water to create shallow rocky enclaves, and even a sandy beachfront, to help filter toxins and bring back habitat for salmon and aquatic mammals like seal and otter.

"People are showing an amazing amount of creative energy," says Heather Trim of People for Puget Sound, describing one event that drew hundreds of peo-

ple together to draw sketches and share ideas about how the city can reinvent itself to cope with a swelling population and projected housing growth within the next century.

Seattle-ites see the waterfront as a visible symbol of civic pride, especially the idea of linking people to the water and its creatures, says Trim. "And Chicago has the nerve to call itself 'the Emerald City'!" she declares derisively.

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