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# GOING GREEN: THE METRONATURAL WAY

WRITTEN BY DAYHAWK KIM

**right:** One look at Seattle, preferably from the Space Needle’s 520ft.-high observation deck, is enough to convince anyone that urban sprawl is not an option. More than 570,000 residents are packed into 84 square miles of land, which does not include 59 square miles of water within city limits.

**above:** Completed in 2002, the Seattle Justice Center was Seattle’s first municipal building with a green roof—a minimal-maintenance system that collects rain water for irrigation, reduces storm-water runoff, and insulates the structure from becoming an urban heat island. *Photographed by Ryan Wolfe.*



Seattle nearly died—twice. The Great Fire of 1889 burned its downtown to the core. The city rose from the ashes by building a new downtown on top of the ruins. Nearly a century later, the Boeing Bust threatened the city’s viability. A billboard sign reading, “Will the last person leaving Seattle turn out the lights?” was a cruel joke. The city recovered again—this time by infusing caffeine, planes, and software into a unique Pacific Northwest recipe. Today’s Seattleites feel another sense of doom. “Emerald City,” an old marketing slogan and a distant observation of nature’s canvas, gave way to “metronatural,” a collective mindset that calls for balancing ultra-urban living with the plain need to be able to sustain life. And it is not all about parading cute and cuddly polar bear cubs for cash donations. It is also about the bottom line.

The city draws more than 9 million visitors a year despite its gray skies and “liquid sunshine”—a mix of sun breaks and drizzle. Visitors can easily binge at Seattle’s ubiquitous cafés, overdose on cultural events, empty their wallets at Pioneer Square’s quaint boutiques, or be one with nature in and around this working port city. But hidden in plain sight of the travelers are green buildings, the vanguard in an eager fight against climate change and rising energy costs.

The Seattle Justice Center, which houses the police headquarters and municipal courts, is an unassuming, modern building in the Civic Center campus. What makes this 14-story structure a national showcase for green building? The façade is made up of two glass planes that are separated by 30in. of air space to trap warm air in winter and release it in summer. The thermal buffer zone contains directional shades to guide natural light deeper into the building, where sensors control the amount of artificial light. Occupancy sensors will switch off the lights in empty conference rooms. The building also sports a green roof system that collects rain water for irrigation, reduces storm-water runoff, and insulates the structure from becoming an urban heat island—all with minimal maintenance. For all this and more, the Justice Center was given silver-level certification under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

As an urban trendsetter, Seattle gets to choose the color. Green is the new black. And it is catching on. In 2005, Mayor Greg Nickels saw an opportunity to call for a greener future. He vowed to meet or beat Kyoto Protocol targets for reducing greenhouse-gas emissions (7% below the 1990 level by 2012) and rallied his colleagues to do the same. Since then,

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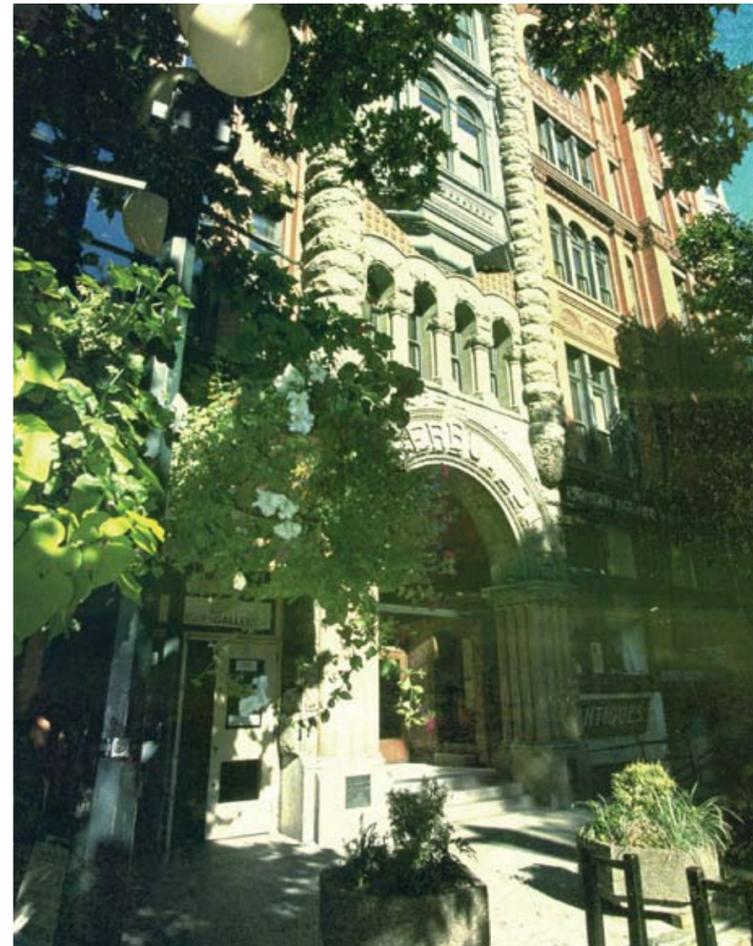
more than 700 cities, including Kansas City, have signed the US Mayors Conference Climate Protection Agreement. When some of the mayors met in Seattle in November for a climate summit, they acknowledged there were political risks in promoting green policies to skeptical constituents. Promoting a sustainable city should be reserved for "your last term in office," quipped Mayor John Robert Smith of Meridian, Miss.

Undaunted by such risks, Nickels used the same venue to unveil the Playbook for Green Buildings + Neighborhoods, an online tool for promoting and rapidly implementing sustainable policies across the country. The US Green Building Council, which oversees the LEED certification process, and Kansas City were among 20 partners that launched the website ([greenplaybook.org](http://greenplaybook.org)).

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water use, according to the latest available data from the US Department of Energy. The Playbook makes a compelling case for targeting buildings. Green buildings can raise the price tag by as much as 2%, but lifetime operating costs are 20% less. That is not surprising considering LEED-certified commercial buildings are designed to lower consumption of electricity by 32%, natural gas by 26%, and overall energy by 36%.

Seattle and Washington state require large public buildings and schools to achieve at least a silver certification. LEED uses a series of requirements and extra credits to award points for sustainable locations, water efficiency, indoor environmental quality, energy consumption, transportation options, and construction materials. Based on the number of points, applicants are certified silver, gold, or platinum. LEED is by no means a requirement for commercial buildings, which can be green with or without the certification. Yet, Seattle offers an incentive that allows



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Historic Pioneer Square is Seattle's oldest residential area, now a major visitor attraction with restaurants, galleries and lively clubs. Photographed by Tim Thompson.

foot, several bus lines, the Waterfront Streetcar, and Amtrak. But driving may be necessary sometimes. Sustainable car-sharing services, such as Flexcar (soon to be Zipcar), have established a loyal following among the environmentally conscious and urbanites whose downtown flats are a dozen blocks away from their car.

Seattle City Light, the local utility, is another silent weapon in the war against climate change. City Light has declared itself the first in the nation to become carbon-neutral by eliminating greenhouse-gas emissions and purchasing offset credits. Going carbon-neutral is easier for a city that gets most of its electricity from hydroelectric dams and wind power. Remaining sources of electricity come from natural gas and coal-fired plants that generate greenhouse gases. Its maintenance vehicles are also far from zero emission. To theoretically offset 100,000 metric tons' worth of greenhouse gases, the utility bought enough carbon credits to achieve "net zero" emissions. The credits included buying biodiesel for city buses and government vehicles and powering cruise ships at port to prevent engine idling.

But a city government alone cannot slow the pace of climate change, as Kansas City's own steering committee on climate protection noted. "Empowering citizens to act is crucial," the committee stressed. Seattleites are not only willing participants but also leaders in striving for a sustainable future. Bumbershoot, one of the largest urban arts and music festivals in the country, will be even greener this year—with biodiesel generators, biodegradable signs, a ban on Styrofoam, and vendor grease recycling. Those who go will have the option to donate \$2 toward the cost of offsetting 440lbs. of carbon dioxide.

Events such as Bumbershoot and the Green Festival, which is bringing more than 350 exhibitors and 125 speakers to Seattle next month, keep sustainable living practices in public consciousness. For a metropolitan city that established itself as a hub for the aerospace, biomedical, and computer industries, access to nature is remarkably easy. And bringing nature back to the city for sustainable living should come only naturally.

That's where urban living begins to imitate nature. 

For more information, visit [visitseattle.org](http://visitseattle.org) and [greenplaybook.org](http://greenplaybook.org).

developers to erect denser residential and commercial buildings so long as the structures are certified under the rating system. Detractors of Nickels' "smart growth" strategy say Seattleites' love affair with cars is not about to end only because they live within walking distance from the urban center, but also because they fear an increase in density could make an already nightmarish traffic congestion worse.

One look at Seattle, preferably from the Space Needle's 520ft.-high observation deck, is enough to convince anyone that urban sprawl is not an option. More than 570,000 residents are packed into 84 square miles of land, which does not include 59 square miles of water within city limits. Seattle feels bigger on clear days when Mount Rainier (14,410ft.), the tallest peak in the Cascade Range to the east, and Mount Constance (7,756ft.) on the Olympic Peninsula to the west, are visible from the city. That sense of openness vanishes with the realization that options for expansion are further limited by Puget Sound and Lake Washington that form much of the city's 200-mile shoreline.

The small geographic footprint of Seattle makes the city walkable. Few people drive to Pike Place Market, also known as the "Soul of the City." Each year, 10 million visitors stop by the Market for produce, fish, and beer sold by hundreds of local merchants—a century-old tradition that predates the mayor's push to buy local goods. Just a mile south of the Market, the Pioneer Square sits on top of the old city that burned to the ground. Sections of the Seattle Underground are still open for tours. Above ground, dozens of restaurants and bars represent a good section of the world's cuisines, and many more small shops fill the retail space. This is one of the most easily accessible areas of Seattle, and it can be reached by