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THE NEXT BOOMTOWNS

Centers of education, exports,
healthcare, and clean tech
are among US cities poised
for economic liftoff.

By Ron Scherer

FOR DAILY NEWS COVERAGE: CSMonitor.com

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Two cyclists take a break from riding to look over downtown Seattle – a city that has many of the attributes, including an enviable lifestyle, that make experts think it will do well in the future.



CITIES

ON THE RISE

FROM SEATTLE TO HUNTSVILLE, ALA., A TIER OF CITIES IS POISED TO PROSPER IN THE NEW ECONOMY, BUTTRESSED BY EXPORTS, INNOVATION, CLEAN TECHNOLOGY, AND HEALTHCARE.

BY RON SCHERER / STAFF WRITER

FORT COLLINS, COLO.

In Houston, the Texas Medical Center is expanding so quickly that it will soon become the seventh largest downtown in the US. By itself. The hospital complex brims with restaurants, shops, and hotels, and employs 100,000 people – the population of Billings, Mont.

In Seattle, the erector-set cranes along the waterfront and big forklifts at the airport are loading exports into containers with the constancy of a piston: plywood to Beijing, halibut and crab to Tokyo, Granny Smith apples to Moscow. Last year, Washington

was the only state to ship more goods to China than it receives.

In Fort Collins, Colo., town fathers are aggressively transforming the heart of the city into a zone that generates as much electricity as it consumes – making it a showcase for the city's quest to become the Silicon Valley of clean energy.

As the United States emerges from the worst recession in 80 years, a new economy is taking root that will help create the next tier of powerhouse cities in America. Just as the Industrial Revolution of the late 1800s and the Information Age of the past 40 years helped shift the urban and regional balance of power in the US, forces are

now at work that will shape who prospers in the economy of tomorrow.

No one yet knows the exact contours of the New Economy. It is more Monet than Rembrandt. But experts say that certain characteristics are already visible on the canvas that will give cities advantages in attracting new jobs and industries.

"In a broad sense, we are at an inflection point," says Mark Muro, policy director at the Brookings Institution's Metropolitan Policy Program. "We are looking at the outlines of a new economy where we consume less, save more, increase our exports, and need to become greener."

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Start with something as prosaic as foreign trade. The permanent trend toward a global economy and the more ephemeral one of a weak dollar are uniting to make places with shipping ports and international airports the rail spurs of tomorrow. That's why a small firm like the Vaughn Company, located southwest of Seattle, can blossom into a business of 80 employees by selling its unique "chopper pumps" for wastewater treatment to customers in more than 70 countries.

Nor is logging more orders abroad the only advantage. Some companies in Europe are finding the euro so strong compared with the dollar that

it makes more sense for them to set up plants in the US rather than ferry their goods here. Thus a French manufacturing giant, Alstom, is opening a turbine plant in Chattanooga, Tenn., where it will employ 360 people. It will ship its machinery, destined for nuclear plants, by a method as old as Huck Finn – down the Tennessee River by barge.

According to a Brookings Institution analysis, other inland cities are boosting their trade with foreign nations as well – including Augusta, Ga.; Wichita, Kan.; and Rochester, N.Y.; especially with the fast-growing BRIC countries (Brazil, Russia, India, and China).

In the approaching "creativity economy," as some are calling it, edu-

cation will be more vital than ever. This means not just an educated workforce but universities that are interwoven with their communities.

The ivory tower is no longer the model. Now it's being replaced with universities that turn out corporate spinoffs as well as graduates. Cities such as Huntsville, Ala., – which has a greater concentration of PhDs than it does Baptist churches – are becoming factories for the most important product of tomorrow: ideas.

In other areas, healthcare complexes are evolving into microeconomies in themselves. They attract labs and researchers. Patients fly in from around the world, needing hotel rooms, and laundry and banking services. The University of Pittsburgh Medical Center annually pays out \$2.7 billion in salaries to its 50,000 employees – the equivalent of the entire Canadian aerospace industry.

Every city, meanwhile, is pining to become the next clean-technology hub. Makers of solar panels, battery-powered cars, and green building materials are to the 2000s what biotech firms were to the 1980s. Certainly, not every city will succeed in becoming the next "Solarcon Valley." But urban areas both large and small are occupying territory in the green revolution – Vandergrift, Pa., as a fabricator of energy-efficient windows; Toledo, Ohio, as a seat of solar energy; San Diego as a hub of biofuels.

The result of all this may be a shuffling of economic power not just among cities but regionally. During the low-cost energy years, the South and Southwest boomed. Nonunion labor was more important than a college degree. "Now, it might be New England and the coastal areas that lead us more than the South and the Sun Belt," says Mr. Muro.

Demographics will drive change, too. Cities that have expensive housing may find themselves at a disadvantage in attracting young people. "We're going to be facing what I call the third civil war – it's going to be a war between cities and metro areas over where young



people will settle, because we're going to have to fill a lot of jobs," says Barry Bluestone, an economist at Northeastern University in Boston.

Many of these young workers will be going to places where they sense a think-outside-the-box culture. "It's hard to be a dynamic economy if you're a culture that does not tolerate risk," says Susannah Malarkey, who heads a trade group, the Technology Alliance, in Seattle.

Cities, of course, have been reinventing themselves since the days of cobblestone streets. Pittsburgh went from being the nation's Bessemer furnace to an education and medical technology leader. Boston, once a textile hub, is the cerebrum of America with all its colleges. What will be the next power centers?

Any list is a bit arbitrary. But below are some cities that at least show the forces remaking urban America, hastened by the rasp of recession. "The collapse two years ago was so dramatic, so unexpected," says Barry Mason, dean of the business school at the University of Alabama. "But out of crisis comes opportunity."

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Clean-tech hubs

Top metro areas for jobs in renewable energy and other green industries based on job postings, investment activity, and patent applications.

1. San Francisco-Oakland-San Jose, Calif.
2. Los Angeles-Riverside-Orange County, Calif.
3. New York-Northern New Jersey-Long Island
4. Boston-Worcester-Lawrence-Lowell-Brockton, Mass.
5. Washington, D.C.-Baltimore
6. Denver-Boulder-Greeley, Colo.
7. Seattle-Tacoma-Bremerton, Wash.
8. Portland-Salem, Ore.
9. Chicago-Gary-Kenosha, Ill.-Ind.
10. Sacramento-Yolo County, Calif.
11. San Diego
12. Austin-San Marcos, Texas
13. Phoenix
14. Detroit-Ann Arbor, Mich.
15. Houston-Galveston-Brazoria, Texas

SOURCE:
Clean Edge,
Inc., 2009

Recession-proof cities

The strongest performing metro areas in the past year based on employment trends, output of goods and services, and housing prices.

1. Austin, Texas
2. Baton Rouge, La.
3. Columbia, S.C.
4. Dallas
5. Des Moines, Iowa
6. El Paso, Texas
7. Harrisburg, Pa.
8. Honolulu, Hawaii
9. Houston
10. Jackson Miss.
11. Little Rock, Ark.
12. McAllen, Texas
13. Oklahoma City
14. Omaha, Neb.
15. Pittsburgh, Pa.
16. Rochester, N.Y.
17. San Antonio
18. Tulsa, Okla.
19. Virginia Beach, Va.
20. Washington, D.C.

SOURCE: Brookings Institution

Biggest urban economies

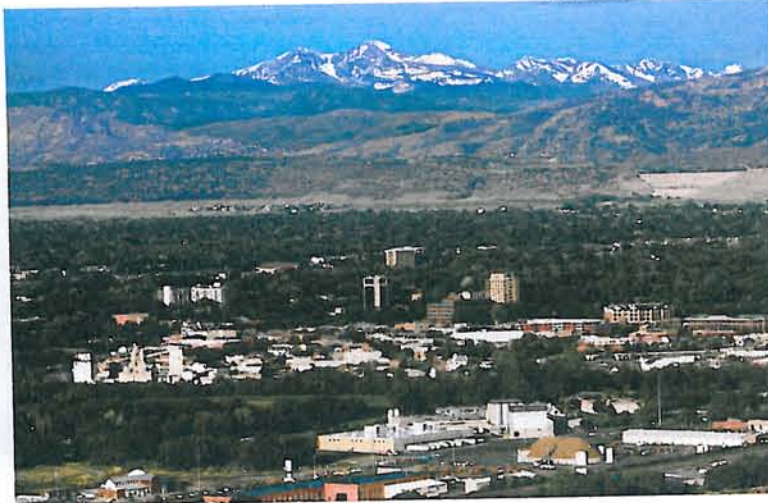
Top 10 metro areas as measured by output of goods and services (2008)

- | | |
|---------------------------------------|-----------------|
| 1. New York | \$1.26 trillion |
| 2. Los Angeles..... | \$717.9 billion |
| 3. Chicago | \$520.7 billion |
| 4. Houston | \$403.2 billion |
| 5. Washington, D.C..... | \$395.7 billion |
| 6. Dallas-Fort Worth, Texas..... | \$379.9 billion |
| 7. Philadelphia | \$331.9 billion |
| 8. San Francisco-Oakland, Calif. | \$310.8 billion |
| 9. Boston..... | \$299.6 billion |
| 10. Atlanta | \$269.8 billion |

SOURCE: Commerce Department



DAN BIHN/ENVIROFIT



RYAN BURKE/CITY OF FORT COLLINS

Melanie Sloan (left) of Envirofit holds the core of a direct-injection retrofit technology that dramatically cuts the emissions of Asia's auto rickshaws. The start-up is based in Fort Collins, Colo. (right), a city trying to become a green-tech hub in the shadow of the Rocky Mountains.

HUNTSVILLE BUILDS ON A BASE OF PHDS

BY CARMEN K. SISSON / CORRESPONDENT

HUNTSVILLE, ALA.

You should probably leave the rocket scientist jokes at home when visiting Huntsville, Ala. The chances are good (1 in 12, in fact) you'll meet one here. In a state beset with educational challenges, this mid-size city (pop. 396,000) is an anomaly, a figurative brain soup where intellectual capital is a commodity and innovation is the driving force behind economic recovery and future success.

When retired US Army Lt. Col. Levern Eady began looking for a place to relocate his young family, Huntsville immediately topped his list, not surprisingly. Built on the spine of its two major employers, Redstone Arsenal and NASA's Marshall Space Flight Center, the once-sleepy cotton town is landing on a lot of lists these days: Forbes's best place to weather the downturn, Fortune's No. 1 location to start a small business, Business Week's best place to raise children, Kiplinger's best overall city.

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FORT COLLINS TRIES A CLEAN (TECH) SWEEP

BY RON SCHERER / STAFF WRITER

FORT COLLINS, COLO.

Melanie Sloan, a soot-covered lab technician, is trying to boil water to help save lives. But Ms. Sloan isn't concerned with the liquid.

On a recent day, she's in her lab steadily shoving firewood into a pipe-like stove that is heating the water. The stove is similar to those used by villagers around the world. The difference is that hers uses less fuel and produces much less carbon monoxide — a deadly gas that kills thousands of people each year.

The goal for Sloan and the non-profit firm she works for, Envirofit, is to sell the stove in places such as India and Africa and dramatically clean up indoor air. They hope to produce 10 million over the next five years.

Sloan's effort in some ways illustrates one reason Fort Collins is positioning itself as a city of the future: It's staking out a position as a nexus of clean and renewable energy.

Town fathers have been cobbling together businesses with Colorado State University (CSU) professors loaded with ideas. Today, in the shadow of the Rocky Mountains, labs are doing everything from extracting oil from algae to producing überefficient engines that use lasers instead of spark plugs.

The slew of ideas has energized the business community, including a local beer company that is recycling the methane from its waste products

for other businesses to use. "The city has undergone a substantial restructuring of itself from high-tech manufacturing, through the dotcom era, to one focused on research and development and production in the clean-energy sector," says Martin Shields, a professor of economics at CSU.

Perhaps it's not surprising Fort Collins has reinvented itself, particularly in a green way. At least 50 percent of the 140,000 residents have a four-year college degree or more. The city prides itself on encouraging alternative modes of travel: It maintains a "bike library" for residents who want to borrow a Schwinn or Trek for up to a week. As in other parts of Colorado, residents here just north of Denver enjoy an active outdoor lifestyle.

The city is eager to be a model for others, including one of the first in the nation to create a downtown section, called FortZED, that generates as much energy as it consumes. It has fitted buildings with micro wind turbines, solar panels, and fuel cells, as well as encouraged energy-saving measures. City officials believe this is one reason Fort Collins just won a federal grant of \$18 million to help establish a "smart grid," which will further reduce energy consumption.

Some local firms have diversified into clean tech. One called Woodward used to make speed controls for trucks. Now it's working on converting diesel engines to compressed natural gas.

Other companies started from scratch, born out of work at CSU. A new \$100 million solar-cell plant sprang from one professor's lab. A

The Texas Medical Center (right), the largest facility of its kind in the world, employs 100,000 people and handles 65,000 patients a day. It is helping boost Houston's economy.

lithium battery factory came from another's. "CSU is the innovation engine that churns out a lot of the new ideas," says Bryan Willson, a mechanical engineering professor involved in several ventures, including Envirofit.

More green revolutionaries may be on the way. "We're pursuing and targeting clusters of companies involved in clean energy," says Doug Hutchinson, the city's mayor.

