

Pittsburgh Renaissance (English Translation)

By Tang Weiwei, Editor, Forbes China Published in the October 2010 issue

Pittsburgh, once known as the City of Steel, underwent a dramatic renaissance through economic restructuring and a push for innovation.

When President Barack Obama announced that Pittsburgh was going to host the G-20 Summit in 2009, it was indeed a surprise for some. To many, the image of Pittsburgh as an old smoke-filled manufacturing city lingered.

President Barack Obama chose Pittsburgh because the city is exactly reflective of his commitment to initiate change. Pittsburgh underwent a dramatic transformation from a traditional, industrial city to a city embracing green technologies and sustainability — a region emerging successfully out of economic recession.

Though the economic recession hasn't completely receded, Pittsburgh has already recovered and displayed uncompromised vigor and energy. Pittsburgh's unemployment rate has tracked below the national average for 27 months in a row. And the reasonable cost of real estate in the region allowed Pittsburgh to escape the burst of the housing bubble that so negatively impacted other parts of the U.S.

"In the process of global economic recovery, Pittsburgh has already tasted and enjoyed the competitive edge derived from its recognized transformation," Pittsburgh Mayor Luke Ravenstahl commented.

The Recession in the 80s

People often compare Detroit with Pittsburgh in the 1980s. In the financial crisis, Detroit was hit hard due to the recession bitterly experienced in the auto industry.

In the early '80s, Pittsburgh weathered the same situation as Detroit. At the best times, the steel output of Pittsburgh alone surpassed the total of the rest of the countries around the world. However, because of globalization, Pittsburgh gradually lost its competitive advantage to cheaper imported steel products. This shift did not only constitute an enormous shock to the steel industry in Pittsburgh, but it also exerted a tremendous personal impact on the lives of the Pittsburgh people - whose very lives were often defined through the steel industry.

Educated and talented young people chose to leave Pittsburgh. Moreover, a large number of the labor force in the steel industry also left Pittsburgh for other career opportunities.

Collapse or Renaissance: Pittsburgh had to change

"Pittsburgh is very proud of its steel-making heritage. When a community defines itself by a single industry it can be hard to move on and make the difficult decisions to transform an economy. For Pittsburgh, this transition in mindset took 10 years. For a decade many people in our region waited for the steel mills to reopen, for the old ways to return. It was only in the late 1980s and early '90s, when the mills were dismantled, that people came to fully understand that we had to invest in a new, more diverse economy," said Pittsburgh Mayor Luke Ravenstahl.

Can a traditional industrial city achieve successful transition? London, Birmingham, and Liverpool are all examples of success transition created by strong leadership.

Pittsburgh perhaps could do the same. Through private and public sector cooperation and collaboration the region's economy was diversified to include innovation and technology ventures and quality of life assets — building on the foundation of what the region has historically done well, including manufacturing.

Investing in Innovation

The Pittsburgh Entrepreneur Fund, administered by the city's Urban Redevelopment Authority, is one example of a non-profit support program. A revolving loan fund for start-up and growing businesses, including emerging technology based firms, this program targets both small businesses and young adults emerging from the city's universities. It encourages entrepreneurs who may not have the capital to grow their ideas in Pittsburgh.

Mayor Raventsahl was most excited about one initiative called Innovation Works. In 10 years it has channeled \$48 million in Pennsylvania tax dollars to local technology companies. This has helped to attract more than \$750 million in additional capital to the Pittsburgh region — a ratio of more than \$17 for every \$1 of state funding invested.

Among these success stories of this initiative are AETHON and SEEGRID — robotics companies that emerged from research at Carnegie Mellon University. AETHON has developed a strategic partnership with Bosch Group, a global leader in industrial technology, and was featured by Forbes.com as one of "Seven Technologies That Could Change Healthcare." SEEGRID automates warehouses. It just opened a new robotics manufacturing facility near Pittsburgh International Airport, creating 100 new jobs.

"Government, higher education and business, with the support of our private foundations, made a concerted effort to commercialize new technologies spinning out of our universities. This is one of the three keys to Pittsburgh's transformation," Mayor Ravenstahl said. "Additionally, we didn't give up on our manufacturing strength, and we worked to enhance the quality of life for all of our citizens. These are the other two key points relative to our transformation."

First and foremost, Pittsburgh has invested in its people through its 35 colleges and universities to encourage innovation and entrepreneurship — creating entire new industries in health care & life sciences and information & communications technologies. Today, Pittsburgh is home to 1,600 IT companies and about 500 life sciences companies, many of which did not exist 30 years ago.

Pittsburgh is blessed to be home to two globally leading research universities, Carnegie Mellon University and the University of Pittsburgh, that together attract hundreds of millions of federal research dollars per year. Established businesses have partnered with these two universities and others in the region to develop talent and to identify promising technologies to commercialize. Alcoa, Bayer Material Science, PPG Industries and U.S. Steel, for example, have all partnered with Carnegie Mellon, the University of Pittsburgh and/or Pennsylvania State University.

Pittsburgh has also developed special programs to encourage innovation and entrepreneurship. With the help of its universities and local foundations, non-profit support organizations have been created that are funded, in whole or in part, by government resources. Their role is to identify promising new technologies, to encourage the startup of new companies to bring these products to market, and even to provide early stage financing.

"Innovation really runs through the entire story. Innovation by our traditional industries, manufacturing, finance and energy, made it possible for them to compete and prosper in an increasingly global economy, said Mayor Ravenstahl. "Investing in innovations via our regional colleges and universities may have made the biggest economic difference of all."

The Rebirth of an Economy

Pittsburgh, however, did not give up on the steel industry, despite investing in innovation and technology. Although Pittsburgh produces far less steel and employs far fewer steel workers today than it did 30 years ago, Pittsburgh remains the second largest steel-making center in the United States in terms of tonnage and employment.

"In fact, one of the underappreciated aspects of the Pittsburgh transformation is that we did not give up on our historic strengths in manufacturing, finance and energy; we came to grips with the fact that they were industries that would continue to change in the future — alongside entirely new industries, born of technology and innovation," Mayor Ravenstahl said.

This required retooling and retraining of the workforce. Young people, for example, could no longer count on a job in a mill once they graduated from high school. Some education beyond high school — college or trade school or other professional training — was a requisite in the new economy.

One effort to that end is the Pittsburgh Promise, a scholarship program supported by UPMC and numerous other corporations and foundations in the region. The "Promise" to students who live in the city and attend the city's public schools, is that if they graduate and meet the necessary performance and attendance specifications, they will receive tuition assistance for higher education

"Pittsburgh is not giving up on its traditional industries, but it's learning how to adjust to the future. Pittsburgh's a national leader in research and engineering in materials science, especially when it comes to metals. These are increasingly technology-intensive and knowledge-based. And they represent the future of materials manufacturing in our region. Our ongoing challenge is to educate, train and attract enough workers to realize our region's economic promise," said Mayor Ravenstahl.

Renewal: Environment and Economy, Hand in Hand

Pittsburgh's environmental transformation did not begin 30 years ago. It actually began 65 years ago in the waning days of World War II. Then, Pittsburgh was a very wealthy industrial city, one of the richest in the world. But terrible pollution was the price Pittsburgh had paid for economic success.

Government and business leaders came together to create a premier public-private partnership. Pittsburgh implemented the first air quality legislation in the United States. Pittsburghers call it Renaissance One. "Nobody in the world knows better than the people of Pittsburgh what it's like to live in a degraded environment. Nobody knows better than we do how hard it is to clean up. And nobody is more committed than we are to making sure we don't repeat the mistakes of the past. I say that to make the point that "green" is not a fad in Pittsburgh; it is part of our character," said Mayor Ravenstahl.

A national leader in green building practices, Pittsburgh has found it's important to invest in riverfront parks and bike trails and works toward increasing outdoor recreation opportunities in the urban core.

In short, the more Pittsburgh can offer — from its balanced, diversified economy to its affordable and abundant quality of life assets — the more attractive the region will be to talented individuals of all ages and walks of life … people who can help Pittsburgh realize its full potential as a model for the 21^{st} -century economy.