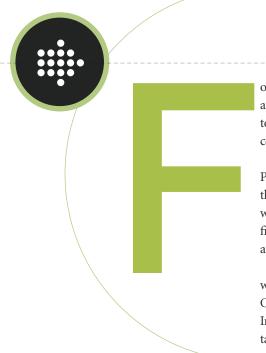


VIEW FROM THE SUMMIT



or two days in April, leaders in Pittsburgh government, business, philanthropy, academia and the nonprofit sector gathered with experts from across the United States and Europe to discuss, envision and begin to plan for a future focused on strengthening the city's commitment to sustainability, innovation and equity.

The p4 Pittsburgh summit was hosted by The Heinz Endowments, the City of Pittsburgh and Mayor William Peduto at Pittsburgh's Energy Innovation Center. Among the nearly 350 invited guests was a delegation from Nordic countries. The event opened with experts in urban design, energy, next-generation mobility, social equity and other fields offering insights into issues related to planet, people, place and performance that are considered critical to advancing Pittsburgh as a sustainable city.

They discussed how the former Swedish industrial city of Malmö was reinvented with a vision of sustainability and explained the planning involved. They described how Chattanooga, Tenn., built an innovation economy around a fiber optic network, offering Internet to all. They spoke of using urban design and architecture to attract visitors and talent and to reclaim neighborhoods while making it possible for cities to divorce themselves from the car culture and to design around biking and walking. And they insisted that sustainability is hollow if the innovation economy it is built around doesn't create opportunities for all.

"Every speaker we heard today was about creating a narrative about what we can do," Heinz Endowments President Grant Oliphant told the conference audience. "What I want to say to Pittsburgh is, enough with the 'can't'; enough with the naysayers.

"These speakers are telling us that in other places—places that are not different from Pittsburgh—people are working on proving that it is possible to have a city that focuses on creativity, sustainability, entrepreneurism and equity; on creating a place for everyone, not just the privileged few; and on proving you can have excellence and efficiency."

PLANET

The industrialization of Pittsburgh delivered wealth and stability for more than 100 years, but at the high cost of polluting the region's air and water. For a city with designs on embracing a sustainable future, such a model is obsolete.



p4 Pittsburgh was a high-energy gathering that offered opportunities for interaction as well as information gathering. Court Gould, above left, executive director of the nonprofit Sustainable Pittsburgh, takes time to network during the event. Greg Watson, director of policy and systems design for the Schumacher Center for a New Economics, describes how a healthy economy relies on local production and purchase of food, goods and services. And the conference's packed audience, right, often responded to speakers and discussions with enthusiasm.

Summit speakers described how the importance of the environment and the role of innovation are being woven into sustainability strategies. They also explained why the time is ripe for restoring the environment to health rather than continuing to contribute to the insults it has endured.

Prospects for renewable energy, for example, have never been brighter and are improving rapidly through innovation, particularly the market for solar power, which has grown tenfold in the last five years, said Hal Harvey, CEO of Energy Innovation, a San Francisco—based energy and environmental policy firm. "The upshot is a fossil-free future costs the same as a fossil-intensive future. That's what I could not have said five years ago. But it won't happen without the kind of innovation we need and the political intensity to drive the adoption of the innovations we need."

He suggested that as cities shift to sustainable strategies, they should set the bar high and tackle such challenges as making net-zero energy in buildings commonplace, phasing out the use of fossil fuels, optimizing systems to use energy and resources more efficiently, and creating an industry focused on developing the tools to do this work.

Nowhere has creating sustainable cities been more deliberate than in Europe's Nordic nations, where decades of progress toward achieving a sustainable future has relied upon

PLANET

Christer Larsson, city planning director for Malmö, Sweden

'SUSTAINABILITY WAS THE KEY QUESTION FOR US...BUT SUSTAINABILITY CHANGED. IN THE BEGINNING, IT WAS MOSTLY STORMWATER MANAGEMENT, GREEN-SPACE FACTORS AND SO ON. WE NOW ARE ALSO USING THE SOCIAL AND FINANCIAL ASPECTS."

WHEN YOU THINK ABOUT BECOMING A MODEL [OF SUSTAINABILITY] FOR THE NATION AND PERHAPS A MODEL FOR THE WORLD, I SUGGEST THAT IF YOU DON'T GET THE INCLUSION AGENDA RIGHT, YOU DON'T HAVE THE MODEL AND NO ONE WILL LOOK TO YOU AS A MODEL."

the support of government and a diverse set of private sector stakeholders willing to collaborate.

In Malmö, Sweden, a government planning process based on sustainability and flexible enough to adapt to different approaches supported the city's transformation.

"Sustainability was the key question for us. That was the mindset," said Christer Larsson, city planning director. "But sustainability changed. In the beginning, it was mostly stormwater management, green-space factors and so on. We now are also using the social and financial aspects."

PEOPLE

Creating and maintaining quality jobs with livable wages, equipping workers and young adults to meet the demands of those jobs, and giving them greater transportation choices to get to work are key issues for cities recognizing the need for social equity as well as sustainability.

Projects that focus on social equity and labor force inclusion can be found across the country. In Oakland, Calif., for example, the redevelopment of an abandoned army base into an international logistics center includes initiatives to prepare low-income residents for the jobs the center offers.

The challenge is bringing such strategies to scale so minorities and low-income families

can share the benefits of innovation economies rather than being crowded out by them, said Angela Glover Blackwell, founder and CEO of PolicyLink, a national research and advocacy organization focused on economic and social equity. "When you think about becoming a model for the nation and perhaps a model for the world, I suggest that if you don't get the inclusion agenda right, you don't have the model and no one will look to you as a model."

In Germany, a dual vocational education model with apprenticeship opportunities has shown success in preparing students for the workforce who don't have the desire or opportunity to attend college. Students are taught the theory and practice of various occupations in the classroom and learn by doing as apprentices in their chosen field.

"Learners will acquire marketable skills and earn money while they do it instead of piling up debt," said Jürgen Siebel, senior vice president of human relations at Siemens. "Employers will acquire access to employable talent. Society, because of the employability of the population, will attract investment."

In seven U.S. cities, including Pittsburgh, TechShops have opened, giving aspiring entrepreneurs easy access to do-it-yourself fabrication shops and technical training for a monthly fee. They've become popular "maker" spaces where anyone 16 or older can learn how to use tools such as laser cutters and 3-D printers and to ready their product ideas for the market, enabling some to launch companies making as much as \$1 million in sales, said Mark Hatch, TechShop co-founder and CEO.

Urban transportation is at a crossroads today as advanced technology, growing popularity of walking and biking, and new attitudes about mobility are demanding that cities rethink how people



"WHAT WE FOUND WAS THAT WHEN CITIES OPENED DATA, SOFTWARE DEVELOPERS, ARTISTS AND STORYTELLERS CAME IN. SUDDENLY IT WAS AN ENGAGEMENT POINT WITH THE CITY."



move through their communities, said Gabe Klein, senior venture partner at Fontinalis Partners. "We have to redesign around people and less around individual [transportation] modes. If you don't, the car becomes the de facto mode. We see so many cars out there and that's what we do."

PLACE

Leveraging and enhancing Pittsburgh's unique qualities of place is another important piece of the framework for developing a sustainable city. And in cities recognized as leaders in sustainability, urban design and architecture play a key role.

Cities that are increasingly considering ways to make themselves places that invite people to walk and bike rather than rely on their cars require little convincing that it is to their advantage to do so, said Jeff Speck, author of "Walkable City." The question now is how to encourage Americans to walk when driving is easy and inexpensive.

The answer, he said, is the walk has to be as good as the drive and accomplishing that involves deliberate planning and design to make the experience useful, safe, comfortable and interesting. "If you don't do all of those things, you don't create walkers by choice. If you don't create walkers by choice, we don't develop the city around walking."

Another question is how to engage people in making their city a better, more sustainable place to live. In San Francisco, the city's open data program redefined relationships between technology and art and has led to creative ways of raising awareness and engagement around city issues. The data, for example, was used to show how crime was committed in a certain neighborhood, on a certain street, at a certain time like clockwork. The realization sparked public debate over whether police resources might be better deployed.

"What we found was that when cities opened data, software developers, artists and storytellers came in," said Peter Hirshberg, chairman of the Gray Area Foundation for the Arts. "Suddenly it was an engagement point with the city."

PERFORMANCE

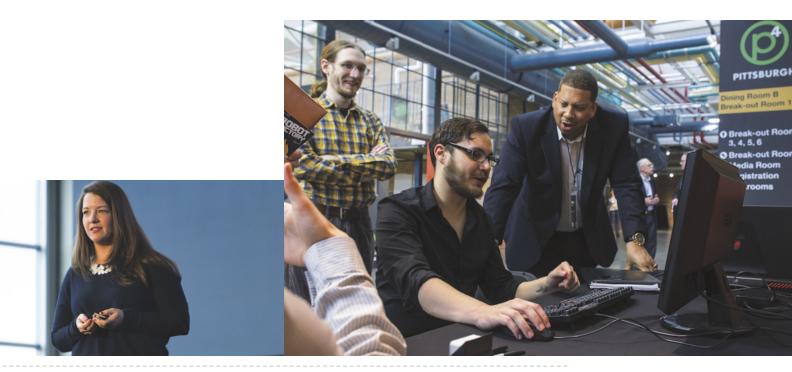
The Cambridge Innovation Center was founded in Boston's Kendall Square next door to the Massachusetts Institute of Technology in 1999 as innovation space for the entrepreneurs it hoped to attract. Today, it boasts some 600 companies, including one of the largest clusters of startups in the world.

Timothy Rowe, the center's founder and CEO, observed that when entrepreneurs and startup activity are concentrated "a certain alchemy occurs. They start to help each other in ways that are hard for them to help each other when they are separated. It starts to attract other activity and support and begins to build on itself."

It was one of several examples of how cities are working to intensify the development of their innovation economies, attract outside investment and continue to define themselves as platforms for sustainable development.

Perhaps the most profound step taken by Chattanooga to transform itself from a polluted city in decline to a modern "Gig City" was building a fiber-optic network that connects every house and business to the Internet. The network failed to lure large tech companies as first hoped. But it became a catalyst for an innovation economy, inspiring tech competitions, partnerships, venture capital, local startups and high-growth businesses that continue to flourish.

"We weren't talking about Apple and Facebook anymore," Mayor Andy Berke said. "We were talking about companies that started in Chattanooga, were growing there and were trying to recruit from elsewhere." h



Among the U.S. speakers during the international p4 summit were, from left to right, Mark Hatch, co-founder and CEO of TechShop, headquartered in San Jose, Calif.; Ray Gastil, city planning director for the city of Pittsburgh, and Story Bellows, co-director of the Mayor's Office of New Urban Mechanics in Philadelphia. Between conference sessions, Neighborhood Allies President Presley Gillespie, standing right in the group photo, watches a video demonstration by Adam Chizmar, center, and Garrett Kimball, left. The two are with Simcoach Games, which uses video games to create sustainable behavior change in a variety of settings, including business, government and health care.



Timothy Rowe, founder and CEO of the Cambridge Innovation Center

WHEN ENTREPRENEURS AND STARTUP ACTIVITY ARE CONCENTRATED, "A CERTAIN ALCHEMY OCCURS. THEY START TO HELP EACH OTHER IN WAYS THAT ARE HARD FOR THEM TO HELP EACH OTHER WHEN THEY ARE SEPARATED. IT STARTS TO ATTRACT OTHER ACTIVITY AND SUPPORT AND BEGINS TO BUILD ON ITSELF."