GUD's Sustainable Innovation Zones Global Initiative

Dr. Marc A. Weiss, Chairman and CEO, Global Urban Development; Visiting Professor, University of California, Berkeley December 2024

Global Urban Development (GUD), founded in 2001, is a nonprofit international policy organization and professional network of more than 900 leaders and experts in 64 countries, committed to enabling everyone in the world to live and thrive in peace with each other and in peace with nature. GUD participates in many global partnerships with the UN, World Bank, and

other international organizations to help achieve the Sustainable Development Goals, Paris Climate Agreement, and New Urban Agenda by 2030.

In addition, Global Urban Development specializes in designing innovative, sustainable, and inclusive economic growth and development strategies for cities, counties, regions, states,

and provinces in many countries, including Australia, Brazil, Canada, China, Czechia, Germany, India, Italy, Morocco, Panama, Poland, Singapore, South Africa, Spain, Sweden, UAE, UK, and the US, by applying GUD's strategic policy and action framework, Metropolitan Economic Strategy, Sustainable Innovation, and Inclusive Prosperity.¹



The Four Greens

- Green Savings cutting costs for businesses, families, communities, and governments by efficiently using renewable resources and by reducing and reusing waste
- Green Opportunities growing jobs and incomes through business development and expanding markets for resource efficiency, sustainability, and clean technologies
- Green Talent investing in fundamental assets such as education, research, technological innovation, and modern entrepreneurial and workforce skills, because people are now the world's most vital green economic resource
- Green Places establishing sustainable transportation and infrastructure, and protecting and enhancing the natural and built environment, to create more attractive, livable, healthy, vibrant, prosperous, productive, and resource-efficient areas and communities.

A vital feature of GUD's approach is a strong emphasis promoting Sustainable on Innovation, Climate Resilience, Circular Economy, Clean Energy, and Green Technology solutions based on the "Four Greens" framework: Green Savings, Green **Opportunities, Green Talent**, and **Green** Places.²

GUD's co-founders, Sir Peter Hall (who passed away in 2014) and Dr. Marc Weiss, shared decades of academic, professional, and policymaking experience on urban and regional economic development.³

For the past two decades, GUD has been spreading its Metropolitan Economic Strategy, Sustainable Innovation, and Inclusive Prosperity framework worldwide through many economic development initiatives, ranging from the transit-oriented sustainable development of NoMa in Washington, DC, recognized by the OECD as an international best practice for local economic and employment development⁴; to the economic strategy for Sarasota County, Florida to become a center for innovation in energy and sustainability, funded by the US Department of Energy⁵; to the World Bank-funded Leapfrog Economic Strategy for Brazil's State of Rio Grande do Sul to become the most sustainable and innovative place in Latin America by 2030.⁶

Beginning in 2010, GUD worked with the Obama-Biden Administration and the Brazil Government on the Energy and Climate Partnership of the Americas (ECPA), involving many countries of North, Central, and South America, from Canada to Argentina. In June 2011, GUD helped organize the world's first international conference on Sustainable Economic Development, hosted by Curitiba, Brazil, with a keynote speech by GUD Vice Chair Jaime Lerner, the legendary former Curitiba Mayor and Parana Governor who invented Bus Rapid Transit (BRT) and designed and implemented several other urban sustainable innovations (he passed away in 2020). This conference featured recent US sustainable economic development strategies in which GUD was actively involved, including Portland, OR (which created the first EcoDistricts); San Antonio, TX; San Jose/Silicon Valley, CA; Southwest Florida; and the State of Delaware.⁷ The ECPA conference led to ongoing GUD work in Brazil, in the cities of Curitiba, Belo Horizonte, Sao Paulo, and Porto Alegre (birthplace of Participatory Budgeting).



Since 2015, GUD has been participating in the implementation of the Rio Grande do Sul (RS) Leapfrog Economic Strategy by helping organize and coordinate the Porto Alegre Sustainable Innovation Zone (ZISPOA), in collaboration with the RS state government, Porto Alegre city government, Federal University of Rio Grande do Sul (UFRGS), and Federal University of Health Sciences of Porto Alegre (UFCSPA).⁸ ZISPOA, consisting of 15 adjacent

Porto Alegre neighborhoods with a total population of 210,00 residents, is focused on becoming the most solar-powered, energy efficient, bike-friendly (sustainable mobility), and renewable technology-friendly (circular economy/zero waste) urban area in Latin America

by 2030. ZISPOA has made significant progress over the past eight years, generating more than a dozen startup businesses, building several sustainable neighborhood improvements, and mobilizing many professors and students to help transform university education and research, including creating a new interdisciplinary Sustainable Innovation Professional (SIP) graduate program, greening campus facilities, and supporting Sustainable Innovation-led community economic development in nearby neighborhoods.



Sustainable Innovation Zones near urban universities, technology parks, and business incubators are designed to become regional and international magnets for talent and concentrated experiments in developing advanced technologies and globally scalable products and services that conserve, reuse, and renew resources much more efficiently. Through this approach, people, places, and organizations can experience greater prosperity and quality of life, earning and saving more money with thriving businesses, better jobs, higher incomes, and improved assets -- literally "getting richer by becoming greener." At the same time, Sustainable Innovation Zones foster participatory and constructive community activities that help accomplish the UN Sustainable Development Goals, Paris Climate Agreement, and New Urban Agenda.

Sustainable Innovation Zones are based on combining together into positive action *six key elements:* **Innovation and Technology, Entrepreneurship and Startups, Sustainability and Resource Efficiency, Creativity and Collaboration, Participatory Community Management**, and **Business-Friendly Environment**. These zones incorporate most aspects of successful "technology innovation ecosystems" and "innovation districts" -- college and university education and research, technology transfer, business incubators and accelerators, startup hubs, coworking and maker spaces, fab labs, hackathons, meetups, boot camps, angel investors, venture capital, financial and regulatory incentives, etc. -- and add four more vital components: 1) place-based community emphasis; 2) primary purpose promoting Sustainable Innovation technologies, businesses, and talent; 3) active participation and support by sustainability, social, and creative design experts and activists (in addition to entrepreneurs, technologists, and investors) and 4) empowered by a highly participatory and inclusive civil society movement.

In addition, the commitment of Sustainable Innovation Zones to generating Inclusive Prosperity in urban neighborhoods represents a "community development ecosystem" from the perspective of community development corporations, business and civic associations, labor unions, producer and consumer cooperatives, community-based health care and affordable housing organizations, religious groups, and business improvement districts. The key distinction is that Sustainable Innovation Zones are specifically focused on advancing sustainability and resource efficiency as the best ways to achieve broad-based Inclusive Prosperity. Also, Sustainable Innovation Zones are comparable in certain aspects to EcoDistricts, Transition Towns, and other urban neighborhood sustainability movements, and similar to "creative districts" in terms of promoting local creative and collaborative businesses and cultural activities for economic development.

In 2018 GUD helped organize two more Sustainable Innovation Zones, ZISSAN in Santo Angelo, a smaller city in Brazil⁹ and ACTA in Panama City, Panama.¹⁰ Since 2019 Western Sydney University has been working with GUD to plan the new Penrith Sustainable Innovation Community (PSIC) as part of major urban development expansion in Australia's Greater Western Sydney region.¹¹ In 2019

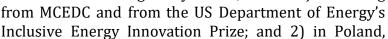


GUD began organizing three Sustainable Innovation Zones in the US, UK, and Canada: 1) in New York City with Brooklyn College/City University of New York; 2) in London with University College London (UCL); and 3) in Toronto with the University of Toronto; though all three were put on hold during 2020 due to the COVID-19 pandemic.



During 2022 GUD resumed spreading Sustainable Innovation Zones globally: 1) in the US with the new Wheaton Sustainable Innovation Zone (WSIZ) in Montgomery County, Maryland,¹² where GUD is collaborating with the Montgomery County

Economic Development Corporation (MCEDC), Bethesda Green, and One Montgomery Green, with major funding







where GUD is working with faculty and students from the Poznan University of Technology, Adam Mickiewicz University, and Poznan University of Economics

and Business, to organize the Poznan Sustainable Innovation Zone, called EDIT (Ecological District of Innovation and Technology) Poznan.¹³ Recently they were awarded a substantial Driving Urban Transitions (DUT) grant from the European Union that will significantly strengthen EDIT Poznan and also help generate three new Sustainable Innovation Zones in Europe: EDIT Tallinn in Estonia, EDIT Thessaly Region in Greece, and EDIT Ljubljana in Slovenia.

In November 2022 the US National Academies of Sciences, Engineering, and Medicine (NASEM) published a new report, *Operationalizing Sustainable Development to Benefit People and the Planet*.¹⁴ Chapter 5 highlights two major case studies that NASEM's distinguished international expert committee considered to be important examples of sustainable urban development. The case study for the Global North is about Copenhagen, Denmark. The case study for the Global South is about Porto Alegre, Brazil, focusing on ZISPOA.¹⁵

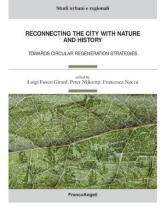


BOX 5-2 Global South: Porto Alegre, Brazil

Generating sustainable prosperity and quality of life for urban residents requires a new development paradigm, stated Marc Weiss, chairman and CEO of Global Urban Development (GUD), but "sear and inertia get in the way." A solution: "We need to replace economic fear with economic hope." GUD was founded in 2001 with a 30-year strategy to enable people to thrive in pace with each other and with nature through sustainable innovation and inclusive prosperity.

Porto Alegre Sustainable Innovation Zone (ZISPOA) GUD has been involved in a World Bank-funded strategy for the southern

GUD has been involved in a World Bank-tunded strategy for the southern Brazilian state of Rio Grande do Sul. To keep people actively engaged at the local level and over the long term, the strategy employs Sustainable innovation Zones: that combine six elements: (1) innovation and technology, (2) entrepreneurship and startups, (3) sustainability and resource efficiency, (4) creativity and collaboration, (5) participatory community management, and (8) business-friendly environment (Weiss, 2019).



On UN World Cities Day, October 31, 2023, a new book was published in Europe with a chapter by Dr. Marc Weiss on "The Porto Alegre Sustainable Innovation Zone (ZISPOA): Circular Economy, Climate Resilience, Sustainable Innovation, Participatory Community Transformation, and Inclusive Prosperity" in *Reconnecting the City with Nature and History: Towards Circular Regeneration Strategies*, edited by Luigi Fusco Girard, Peter Nijkamp, and Francesca Nocca, and published by FrancoAngeli in Milan, Italy.¹⁶

Last year Dr. Weiss was appointed as Robert S. Cornish Chair and Visiting Professor in the Department of City and Regional Planning, College of Environmental Design, University of California, Berkeley. He taught an economic development studio course during spring semester 2024 on "Strategic Planning and Organizing for a Sustainable Innovation Zone in Oakland."¹⁷ GUD is working in collaboration with the Oakland City Government, Greenlining Institute, UC Berkeley, and many other community and regional stakeholders to develop both a Sustainable Innovation Zone and a citywide Inclusive Green Economy Strategy called the "Green Moonshot", generating Sustainable Innovation and Inclusive Prosperity by investing in Green Savings, Green Opportunities, Green Talent, and Green Places. Oakland will "get richer by becoming greener" through successful implementation of the city's *Equitable*

*Climate Action Plan*¹⁸ in coordination with their forthcoming Economic Development Action Plan, and with the Green Moonshot, a collaborative large-scale building decarbonization initiative focused on retrofitting many homes and stores with energy efficiency, electrification, solar power, battery storage, electric vehicle and e-bike charging, climate resilience, water conservation, sustainable landscaping, and other green improvements.

In Brazil another Sustainable Innovation Zone is being organized with support from the Rio Grande do Sul State Government's Secretary of Innovation, Science, and Technology (SICT): the Litoral Norte Sustainable Innovation Zone (ZISLIT), anchored by the Federal University of Rio Grande do Sul (UFRGS) campus in Tramandai.

Since 2002, Global Urban Development has worked with the Government of Sweden, the Royal Institute of Technology (KTH) in Stockholm, and other Swedish institutions on many activities, including the European Union's ESPON program¹⁹, the Mistra Foundation's Sustainable Urban Development project²⁰, and the annual Tallberg Forum²¹. Starting in 2015, Sweden (especially the Swedish Embassy in Brasilia, the Swedish Institute in Stockholm, and Tetra Pak in Sao Paulo) has been one of the strongest international supporters of ZISPOA in Porto Alegre²².

GUD has been working closely beginning in 2021 with a major Swedish climate action and urban sustainability initiative called Viable Cities²³, including organizing a May 2022 international seminar in Washington, DC²⁴ and a site visit to the Wheaton Sustainable Innovation Zone (WSIZ)²⁵. Currently GUD is collaborating with Viable Cities to advance stakeholder engagement for their Climate Neutral Cities 2030 initiative in Sweden, particularly for the System Demonstrators in the cities of Lund and Stockholm²⁶. Also, GUD is working with Viable Cites on the European Union's NetZeroCities Initiative²⁷, and on the Climate Smart Cities Challenge in Africa and Latin America with UN-Habitat and other key partners²⁸. In addition, GUD is collaborating with Viable Cities, Vinnova, and the Sweden-US Green Transition Initiative (GTI) in the San Francisco Bay Area, including on sustainable economic development and climate resilience initiatives in Oakland as part of the Green Moonshot²⁹. Soon Sweden, led by Viable Cities and Vinnova, will be launching a new global Joint Initiative for Climate-Neutral Smart Cities with many international partners including GUD, UN-Habitat, Cities Climate Finance Leadership Alliance, and World Resources Institute.

¹ <u>https://www.globalurban.org/National Governors Association Report --</u> <u>State Policy Approaches to Promote Metropolitan Economic Strategy.pdf;</u> <u>https://www.globalurban.org/Harvard MES article.pdf</u>

² <u>https://www.globalurban.org/Green_Capitalism.pdf;</u> <u>https://www.globalurban.org/Sustainable_Economic_Development_Strategies.pdf</u>

³ <u>https://www.globalurban.org/Built_Environment_Peter_Hall_article.pdf;</u> <u>https://www.globalurban.org/Global_Outlook_January_2001.pdf</u>

⁴ <u>https://www.globalurban.org/GUD_OECD_NoMa_Report.pdf</u>; <u>https://www.globalurban.org/The_Economic_Resurgence_of_Washington, DC.pdf</u>

⁵ <u>https://www.globalurban.org/Sarasota_County_Strategic_Recommendations_Report.pdf</u>

⁶ https://www.globalurban.org/2015 RS LEAPFROG ECONOMIC STRATEGY.pdf

⁷ <u>https://www.globalurban.org/ECPA.htm</u>

⁸ <u>https://www.globalurban.net/porto-alegre-brazil</u>

- ⁹ <u>https://www.globalurban.net/santo-angelo-brazil</u>
- ¹⁰ <u>https://www.globalurban.net/panama-city-panama</u>
- ¹¹ <u>https://www.globalurban.net/western-sydney-australia</u>
- ¹² <u>https://www.globalurban.net/wheaton-us</u>
- ¹³ <u>https://www.globalurban.net/poznan-poland</u>
- ¹⁴ <u>https://nap.nationalacademies.org/catalog/26654/operationalizing-sustainable-development-to-benefit-people-and-the-planet</u>
- ¹⁵ <u>https://nap.nationalacademies.org/read/26654/chapter/7#40</u>
- ¹⁶ <u>https://www.globalurban.net/_files/ugd/be81d1_8c51ec08afce46ec9c0fcc6f6963ba2e.pdf</u>
- ¹⁷ https://classes.berkeley.edu/content/2024-spring-cyplan-190-003-lec-003
- ¹⁸ <u>https://www.oaklandca.gov/projects/2030ecap</u>
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- ²² <u>https://www.globalurban.net/porto-alegre-brazil</u>
- ²³ <u>https://en.viablecities.se/</u>
- ²⁴ https://www.globalurban.net/ files/ugd/be81d1 d1cefe3e7de845e7b1d7480323c3cfd9.pdf
- ²⁵ <u>https://www.globalurban.net/wheaton-us</u>
- ²⁶ <u>https://viablecities.se/en/klimatneutrala-stader-2030/systemdemonstrator/;</u>
- https://viablecities.se/en/satsningar/snabbsam/; https://viablecities.se/en/satsningar/coaction/
- ²⁷ <u>https://netzerocities.eu/</u>
- ²⁸ <u>https://climatesmart.citieschallenge.org/</u>
- ²⁹ https://www.gti-sweden.se/