

GUD's Sustainable Innovation Zones Global Initiative*

Dr. Marc A. Weiss, Global Urban Development, March 2023



Global Urban Development (GUD), founded in 2001, is a nonprofit international policy organization and professional network of more than 700 leaders and experts in 60 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, Czech Republic, 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 A vital feature of GUD's



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.

approach is a strong emphasis on promoting Sustainable Innovation, ClimateTech Resilience, and Circular Economy, as expressed in this brief article, "The Global Future of Green Capitalism, including 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 Administration and the Brazil Government on the Energy and Climate Partnership of the Americas (ECPA), involving all of the 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 and 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 (UFCSA).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 seven 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, and higher incomes -- 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 grassroots citizens 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 Beginning in 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 that part of Australia.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; 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 has 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 funding from MCEDC, and from the US Department of Energy that awarded WSIZ an Inclusive Energy Innovation Prize; and 2) in Poland, where GUD is working with the Poznan University of Technology and Adam Mickiewicz University to organize the new Poznan Sustainable Innovation Zone, called EDIT (Ecological District of Innovation and Technology) Poznan.¹³



Recently 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 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



* https://e3591706-7711-4e9a-ad37-2228f17ebdf2.filesusr.com/ugd/be81d1_3a489f58031845a49d8a2993db7b8ee0.pdf

¹ https://www.globalurban.org/National_Governors_Association_Report_-_State_Policy_Approaches_to_Promote_Metropolitan_Economic_Strategy.pdf;
https://www.globalurban.org/Harvard_MES_article.pdf

² https://www.globalurban.org/Green_Capitalism.pdf

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

⁴ https://www.globalurban.org/GUD_OECD_NoMa_Report.pdf

⁵ https://www.globalurban.org/Sarasota_County_Strategic_Recommendations_Report.pdf

⁶ https://www.globalurban.org/2015_RS_LEAPFROG_ECONOMIC_STRATEGY.pdf

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

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

⁹ <https://www.globalurban.net/santo-angelo-brazil>

¹⁰ <https://www.globalurban.net/panama-city-panama>

¹¹ <https://www.globalurban.net/western-sydney-australia>

¹² <https://www.globalurban.net/wheaton-us>

¹³ <https://www.globalurban.net/poznan-poland>

¹⁴ <https://nap.nationalacademies.org/catalog/26654/operationalizing-sustainable-development-to-benefit-people-and-the-planet>

¹⁵ <https://nap.nationalacademies.org/read/26654/chapter/7#40>