

Innovating and Inventing for Sustainable Cities.

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Global population growth and urbanization continue apace, making cities ever more important to humanity. But most cities are not environmentally, economically, socially, or fiscally sustainable and are unable to secure the investment financing needed for multi-dimensional sustainability. At their root these problems proceed from the misapplication of Cartesian reductionist approaches to complex dynamic city-systems. A new framework is needed for integrated, collaborative, systemically effective investment essential to city sustainability; this paper introduces an initiative to provide that framework, now under way in partnership with the cities of London and Boston. This is a unique opportunity for the System Dynamics field, one that requires large-scale socio-economic innovation as well as a host of new technological inventions that will reshape and automate the practice.

Andreas J. Harbig is founding partner and CEO of Greenwood Strategic Advisors AG. For over 25 years he has been advising companies and institutions in shaping and implementing new ways of sustainable value creation. In a variety of executive management positions in business and consulting he has a track record of successfully defining the strategic challenges as well as planning, supporting and implementing the necessary change processes for people and organizations. Among many other publications, in 2002 together with Ricardo Dièz-Hochleitner, Mr. Harbig published the book „Auswege in die Zukunft (Exits into the Future): Fakten und Positionen zur Welt. Impulse vom Global Dialogue der EXPO 2000“- an integration of all the key streams of the EXPO’s Global Dialogue series.

Erich Alexander Voigt is one of the world’s most experienced system dynamicists, having spent over fifteen years in leading technical teams to address complex social, political, economic and business issues. Mr. Voigt is German born and he has an MS in aeronautical engineering (Madrid) and an MBA from M.I.T. During his career he has developed strategies to ensure the survival of a regional language and to achieve sustainable high profitability in energy and media, he has forecast the medium-and long-term evolution of housing markets, petrochemical commodities and the commercial aviation sector, and he has participated in expert teams to assess delay and disruption in some of the world’s most complex engineering and construction projects (like the Channel Tunnel, nuclear power plants, the world’s largest shopping developments, etc.) Mr. Voigt’s expertise covers all aspects of the analysis process, from eliciting information from local experts to applying complex methods to produce useful and accurate results – but also including consensus-reaching, analysis design and commercial negotiations.