1. Record Nr. UNINA9910346845103321 Autore Spangenberg Joachim H **Titolo** Scenarios and Indicators for Sustainable Development-Towards A Critical Assessment of Achievements and Challenges MDPI - Multidisciplinary Digital Publishing Institute, 2019 Pubbl/distr/stampa **ISBN** 3-03897-673-3 Descrizione fisica 1 online resource (180 p.) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Globalization and telecoupling are enhancing the complexity of the Sommario/riassunto coupled socio-ecological system constituted by the interaction between the global ecosphere and the anthroposphere. As a result, the demand for tools to identify transformative innovations, assess future risks, and support precautionary decisions for sustainability is growing by the day in business and politics. Scenarios are a means of simplification, reducing the real-world complexity to a limited number of essential factors to analyze their interactions and support policy formulation, with indicators as communication and monitoring tools. In particular, in a time of fake news and alternative truths a critical reflection amongst producers and users of scenarios and indicators is overdue; the capability for critical self-reflection is what distinguishes science from pseudo-science, and is a condition of trust. The authors of this book test established measurement and modeling approaches against new challenges, assess the weaknesses of prevailing innovation theories and the political-ideological embedment of archetypical scenarios. highlight deficits in taking the physical basics into account, and the

need to understand global interaction and the stepwise process of

weaknesses in data collection, harmonization and indicator generation,

energy transitions, point out technical as well as conceptual

always with a view to solving problems.