Record Nr. UNINA9910779315503321 Autore Vries Bert de <1948-> Titolo Sustainability science / / Bert J. M. de Vries [[electronic resource]] Pubbl/distr/stampa Cambridge:,: Cambridge University Press,, 2013 **ISBN** 1-139-85377-5 1-107-23428-X 1-139-84469-5 1-107-25423-X 1-139-84233-1 0-511-79446-0 1-139-83995-0 1-139-84114-9 1-283-94351-4 Edizione [1st ed.] Descrizione fisica 1 online resource (xvii, 590 pages) : digital, PDF file(s) Disciplina 338.9/27072 Soggetti Sustainable development - Research Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction -- The systems dynamics perspective -- In search of sustainability: past civilizations -- The world in the past 300 years: the great acceleration -- Sustainability: concerns and definitions --Quality of life: on values, knowledge and worldviews -- Energy fundamentals -- On knowledge and models -- Ecosystems -- Human populations and human behaviour -- Agro-food systems -- Renewable resources: water, fish and forest -- Non-renewable resources: the industrial economy -- Towards a sustainable economy -- Outlook on the futures -- Glossary -- References. Sustainable development is becoming the guiding principle for the Sommario/riassunto twenty-first century. This textbook - based on the author's course and rigorously class-tested by his students - provides an introduction into patterns of past and present (un)sustainable development and into the emergence of the notion of sustainable development. It systematically

surveys the key concepts, models and findings of the various scientific

disciplines with respect to the major sustainability issues: energy, nature, agro-food and resource systems, and economic growth. System analysis and modelling is introduced and used as an integrating tool. Stories and worldviews are used to connect the quantitative and the qualitative and to offer the reader an understanding of relevant trends and events in context. Sustainability Science is an ideal textbook for advanced undergraduate and graduate level courses in sustainable development and in environmental and resource science and policy.