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Nota di contenuto	From 'spaceship earth' to the circular economy: the problem of consumption / Robert Crocker -- Can economics assist the transition to the circular economy? / Martin Shanahan -- China's policies for promoting a circular economy: past-decade experiences, future plans and success stories / Xu Zhao -- Biosolids: the growing potential for use / Chin How (Norman) Goh, Michael D. Short, Nanthi S. Bolan and Christopher P. Saint -- Considering 'waste Value' in the circular economy / Helene Cherrier, Meltme Ture, and Nil Ozcaglar-Toulouse -- Circular by design: a model for engaging fashion/textile SMEs with strategies for designed reuse / Jen Ballie and Mel Woods -- The ByeBuy! Shop: testing shopping scapes in a circular economy / Kirsty Mate -- What role for social enterprises in the circular economy? / Ruth Lane and Wayne Gumley -- Developing measures for the waste management hierarchy: a south Australian case study / Anne Sharp, Lara Stocchi, Vaughan Levitzke and Marcia Kreinhold -- Australian

regional waste footprints / Jacob Fry, Manfred Lenzen, Damien Giurco, and Stefan Pauliuk -- Renewing materials: implementing 3D printing and distributed recycling in Samoa / Lionel Taito-Matamua, Simon Fraser, and Jeongbin Ok -- The current state of scrap utilization by Thai SMEs / Singh Intrachooto -- Unmaking waste in construction in the EU and Asian circular economy: a formal institution approach / Rita Yi Man Li, Li Meng, Tat Ho Leung, Jian Zuo, and Yuan Wang -- Municipal solid waste properties in China: a comparison study between Tibet, Beijing and Guangzhou / Wenchao Ma, Lina He, Zeng Dan, Guanyi Chen and Xuebin Lu -- Green manufacturing--from waste to value added materials / Samane Maroufi, Claudia Echeverria, Farshid Pahlevani and Veena Sahajwalla -- Towards an agile circular economy for the building industry / Tim McGinley -- Research on the sustainable water recycling system at Tianjin University's new campus / Sen Peng, Huiping Cui, and Min Ji -- Re-valuing construction materials and components through design for disassembly / Philip Crowther -- Construction and the circular economy: smart and industrialised prefabrication / Abbas Elmualim, Sherif Mostafa, Nicholas Chileshe and Rameez Rameezdeen.

Sommario/riassunto

The legacies of a century of fossil-fuel based development and overconsumption, of treating the environment as a waste sink for industry and agriculture, have left devastating impacts on the earth's air, water and land, and these are directly implicated in Climate Change. In response, a number of global institutions and nations, including the European Union and China, have committed themselves to the development of a circular economy. This will require a transformation of today's linear economy of make, use and dispose as the market dictates, into a Circular Economy. The aim of the Circular Economy is to decouple economic growth from resource and energy use through iterative, systemic social, economic and technological reform. This book presents new theoretical and practical insights into this concept, based on case studies from both the developing and developed world, with an emphasis on economic and material transformation, design for reuse and waste reduction, industrial symbiosis (the planned circulation of resources and energy within an industrial setting), and social innovation and entrepreneurship. Four central themes emerge through the essays presented here: the importance of restorative design in transforming resource flows through both production and consumption, the value of understanding and enumerating wastes in more detail to enable their reuse, the central role of advancing technology and applied science to further this transformation of materials for reuse, and finally, a reconfiguration of design, consumption and retail, so that the present linear economy of make, use and trash can be replaced with a more circular model.
