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Titolo	Circular Economy of Plastics : From Plastics Recycling Towards Feedstock Transformation // edited by Peter Orth, Jürgen Bruder, Ulrich Liman, Manfred Rink
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Descrizione fisica	1 online resource (780 pages)
Collana	Engineering Series
Altri autori (Persone)	BruderJürgen LimanUlrich RinkManfred
Disciplina	668.4192
Soggetti	Refuse and refuse disposal Green chemistry Environmental economics Sustainability Disposal Technology and Management Green Chemistry Environmental Economics Waste Management/Waste Technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- The material -- Feedstock -- The plastics ecosystem -- Mass streams -- Terminology -- Circular Economy of plastics -- A systematic approach -- Product - converters, brand owners, and OEMs -- Market - retailers, users, and consumers -- Wastes - collection, sorting, and recovery -- Raw material - chemical industry and plastics manufacturers -- Producer responsibility -- Non-recovered wastes and legacies -- Plastics wastes -- Biomass -- CO2 -- Mass balancing -- Product carbon footprint -- Life cycle analysis -- Digitalisation -- Logistics -- Standardisation -- EU-regulation -- National regulation in Europe -- Associations, networks, and co-operations -- Studies -- Glossary.
Sommario/riassunto	The book looks at all stages of the plastic value chain: Production with

renewable raw materials instead of oil, waste avoidance, recycling and the necessary use of recyclates, thermal treatment for unavoidable and non-recyclable waste. Martin Faulstich To achieve our climate targets, we need climate-neutral plastics. For this purpose, the following circular raw materials are available: Recyclates, biomass, and CO₂. The life cycle of plastics must not end at the factory gate, product design must consider the end of life. Plastic waste must be valued to motivate consumers to collect and sort it. André Bardow Plastic is in most cases the most climate-friendly option and, as a hidden climate champion, is an important building block in the fight against the climate crisis.

Philipp Lehner The book delves into the complexities of creating a closed-loop system for plastics exploring challenges and opportunities associated with recycling, feedstock diversification, and technological advancements. Peter Vanacker Contents Plastic – the material Circular Economy of Plastic – product , markets, wastes, raw materials Circular feedstock – renewable carbon sources LCA, PCF, Digitization, Standardization Regulatory framework and recycled content quota Target groups Decision-makers and experts in the industry Students, lecturers, scholars in academia Policy makers, national and international public authorities NGOs and business media The editors Dr. Peter Orth was Managing Director of German and European plastics associations. Dr. Jürgen Bruder was Managing Director of national and international plastics associations. Dr. Ulrich Liman was Senior Manager with the plastics industry in Germany, Japan and China. Manfred Rink has worked in management positions in the automotive and plastic industry. .
