1. Record Nr. UNINA9910820633703321 Autore Favre Bernard Titolo Introduction to sustainable transports / / Bernard Favre Pubbl/distr/stampa London, England;; Hoboken, New Jersey:,: ISTE:,: Wiley,, 2014 ©2014 **ISBN** 1-118-64910-9 1-118-62564-1 1-118-64909-5 Descrizione fisica 1 online resource (328 p.) Automation-Control and Industrial Engineering Series Collana 388.049 Disciplina Soggetti Transportation - Environmental aspects Environmental engineering Transportation - Planning - Decision making Transportation and state **Transportation** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Cover; Title Page; Contents; Introduction; Chapter 1 The Fundamentals of Sustainable Transport: 1.1 The ingredients of sustainable transport: 1.2 Towns, territories and sustainable transport; 1.3 Energy and sustainable transport; 1.4 The environment and sustainable transport; 1.4.1 "Sensitive" pollutants; 1.4.2 Greenhouse gases; 1.5 Material and sustainable transport; 1.6 A "committed" change in Europe and elsewhere?; 1.7 Toward a better understanding of the impacts of transport; 1.8 A strategy for sustainable transport; Chapter 2 Vehicles: An Element of the Solution for Sustainable Transport 2.1 Technology: from evolution to revolution2.2 Combustion engines; 2.3 Environmental and energy efficiency; 2.4 Hybridization and electrification; 2.4.1 Vehicles; 2.4.2 Batteries; 2.4.3 Constraints for recharging; 2.5 Energy solutions; 2.5.1 Fuels (refer to the glossary for alternative fuels); 2.5.2 Emerging solutions; 2.6 Noise emissions; 2.6.1 Overall vehicle noise; 2.6.2 Noise reduction; 2.6.3 Noise regulation and its impact on noise environment; 2.7 The intelligent vehicle: "safe-

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Sommario/riassunto

Transport systems have to meet the mobility needs of people and commodities on all scales, from the local to the global level. Concerns about the energy, fumes and sound emissions produced, and about the safety, service quality, intelligence and lifecycle of the systems, etc. can all be included in a systemic approach. This approach can contribute to the development of sustainable solutions, for individual vehicles as well as for transport systems. Derived from an approach combining the social and physical sciences, these solutions result from the integration of physical objects, services a