

1. Record Nr.	UNINA9910789828603321
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Titolo	Two prime movers of globalization : the history and impact of diesel engines and gas turbines // Vaclav Smil
Pubbl/distr/stampa	Cambridge, Mass. : , : MIT Press, , 2010 ©2010
ISBN	0-262-29704-3 1-283-02011-4 9786613020116 0-262-28977-6
Descrizione fisica	1 online resource (270 p.)
Disciplina	621.43
Soggetti	Diesel motor - History Gas-turbines - History Technology and civilization Transportation - Technological innovations - History Motor vehicles - Motors - History Globalization - History
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	""In Prime Movers, Smil's passion for the Cinderellas of civilization focuses on the diesel engines and gas turbines that power ocean vessels and wide-body jets. These engines have made ocean shipping and intercontinental air travel so cheap that they have changed the face of our planet. Marshall McLuhan's dreams of a Global Village have become true in unimagined ways. Being an engineer myself, I admire the way Smil portrays the human Cinderellas of the industrial world: the unsung engineers who made momentous advances in the reliability and efficiency of their machines. Smil's book makes me proud of my profession."--Henk Tennekes, author of The Simple Science of Flight" ""A stimulating book that connects the past with the future, from an outstanding writer who knows all about sustainability and the issues

that make it such a challenge for us."--John B. Heywood, Professor of Mechanical Engineering, Sun Jae Professor, Emeritus, MIT" ""Smil masterfully traces the technological evolution and impact of diesel engines and gas turbines, and makes a convincing case for their role as prime movers of globalization---even though these technologies escape public notice, buried in the bowels of ships, trucks, and power plants, and humming reliably under the wings of planes."--Rajan Gupta, Fellow, Los Alamos National Laboratory."

"The many books on globalization published over the past few years range from claims that the world is flat to an unlikely rehabilitation of Genghis Khan as a pioneer of global commerce. Missing from these accounts is a consideration of the technologies behind the creation of the globalized economy. What makes it possible for us to move billions of tons of raw materials and manufactured goods from continent to continent? Why are we able to fly almost anywhere on the planet within twenty-four hours? In *Prime Movers of Globalization*, Vaclav Smil offers a history of two key technical developments that have driven globalization: the high-compression non-sparking internal combustion engines invented by Rudolf Diesel in the 1890s and the gas turbines designed by Frank Whittle and Hans-Joachim Pabst von Ohain in the 1930s. The massive diesel engines that power cargo ships and the gas turbines that propel jet engines, Smil argues, are more important to the global economy than any corporate structure or international trade agreement." "Smil compares the efficiency and scale of these two technologies to prime movers of the past, including the sail and the steam engine. The lengthy processes of development, commercialization, and diffusion that the diesel engine and the gas turbine went through, he argues, provide perfect examples of gradual technical advances that receive little attention but have resulted in epochal shifts in global affairs and the global economy."--Jacket.
