Record Nr. UNINA9910817550003321 Autore Duan Menglan Titolo Engineering economy in upstream oil and gas field development: a concise appraisal technique for investment decision in upstream oil/gas projects / / Menglan Duan and Mac Darlington Uche Onuoha [Place of publication not identified]:,: Science Press:,: EDP Sciences, Pubbl/distr/stampa , [2020] ©2020 **ISBN** 2-7598-2501-9 Descrizione fisica 1 online resource (286 pages) **Current Natural Sciences** Collana Disciplina 338.27282 Soggetti Petroleum industry and trade Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front matter -- About the Authors -- Contents -- Preface --Acknowledgement -- Chapter 1. Bidding and Petroleum Fiscal Instruments -- Chapter 2. Exploration & Reserve Estimation -- Chapter 3. Appraisal and Field Development Planning -- Chapter 4. Economic Analysis of a Typical Upstream Development Project -- Chapter 5. Investment Decision and Project Selection -- Chapter 6. Project Management in Upstream Oil & Gas Field Development -- Bibliography -- Index Sommario/riassunto The business of upstream oil and gas industry is a complex process that involves multidisciplinary participation. Producing crude oil and natural gas from the subsurface reservoir rocks to the point of the selling terminal requires stage by stage processes that costs several

that involves multidisciplinary participation. Producing crude oil and natural gas from the subsurface reservoir rocks to the point of the selling terminal requires stage by stage processes that costs several hundreds of millions of dollars to the operating companies. Because of the capital intensive nature of upstream investments, every required process is challenged of its economic impact or benefits it will have on the project's net present value (NPV). The techniques applied in determining the economics of these processes and their selection criteria are addressed in the book. This book guides the reader through these strategic processes, and presents the participants involved in the business of upstream oil and gas prospecting and the conditions that dictate the field development and investment decisions by investors. It

also reveals the shared interests and relationships that exist between international oil companies (IOCs) and national oil companies (NOCs) in the exploration and exploitation of their hydrocarbon resources and reserves. This text will serve the purpose of teaching and learning to those in the energy and financial sectors, as the methods, tools, and techniques discussed throughout the chapters will equip students, tutors, experts, and professionals with the necessary skills and knowledge of Exploration and Production (E&P) projects and energy financing and investment. The principles of project management as it applies in upstream oil/gas projects are discussed as well. And the criteria for project ranking, selection, and budgeting which are sine qua non to project financing and execution are well documented in this book.