

Petroleum, Industry and Governments

A Study of the Involvement of Industry and Governments in the Production and Use of Petroleum.
Second Edition

By Bernard Taverne



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Bernard G. Taverne



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Preface to the First Edition

Petroleum, Industry and Governments describes and discusses the main aspects of the involvement of industry and governments with the production and use of petroleum. Within this setting this book gives an account of the technical and environmental aspects of the production of oil and natural gas, and the latter's position and function in the economy. It reviews government policies and attitudes towards petroleum and national and international regulation of onshore or offshore petroleum operations, including petroleum taxation. The book describes the development and working of the oil and natural gas markets, the cost of supply and the establishment of producer prices. Attention is paid to the internationalization of the extractive industry, the way this industry is organized and the old and new forms and manifestations of political risk, with which this industry has to cope. In addition this book contains a special chapter on production economics and the final chapter is devoted to the main forms of inter-company production agreements (joint ventures and unitization agreements). This book elaborates on the subjects described and discussed in the author's 'Introduction to the Regulation of the Petroleum Industry (Laws, Contracts and Conventions)' (first published 1994) and 'Cooperative Agreements in the Extractive Petroleum Industry' (first published 1996). However, this book is not merely an updated version of the earlier publications. Here, the occasion has been utilized to expand the scope of the discussion by paying attention to the value of petroleum for the economy and to its other economic aspects. As a result of this extension into the field of economy and economics, it is believed that this book is of special importance and interest to petroleum venture managers, as well as for independent consultants and other professionals with a commercial business background who are required to give advice with respect to the economic, regulatory and cooperative aspects of petroleum operations. In writing this book, the author has drawn on a total thirty-seven years' experience with the technical, economic

and legal aspects of the international petroleum industry acquired during employment with the Royal Dutch/Shell Group, as well as his appointment as part-time professor at the Delft University of Technology.

The book is based and relies on original material consisting of the officially or otherwise published texts of laws, contracts, etc., official statements and policy documents and further on statistical data as made available to the public by international organizations and institutes, by international oil companies and trade journals.

Leidschendam, The Netherlands April 1999

Preface to the Second Edition

In the year 2000, just one year after the publication of the first edition (1999), the global oil market reached a turning point. Against all expectations, predictions and growing concerns about climate change, the demand for oil started to rise quite steadily in response to an expanding world economy. From the years 2000 to 2006, world consumption increased from 76.3 million b/d to 84 million b/d. Over this period, China's oil consumption rose from 4.8 million b/d to 7.4 million b/d, even overtaking Japan thereby. International prices reacted more sharply, in particular after 2005 the price reached spectacular levels: in November 2007 Brent Dated was nearing the USD 100/b mark. To put the matter in its proper perspective, exactly the same crude had in 1998 been priced at USD 12.72. Even when correcting for the current weakness of the US dollar, this is an astonishing development. Nonetheless in the first quarter of 2008, these trends continued. In the last part of said quarter, the Brent price regularly exceeded USD 100/b in line with a further weakening of the US dollar. The world's annual consumption of natural gas also increased over the period: from 2,428 billion cubic metres in 2000 to 2,851 billion cubic metres in 2006. In light of these trends, the second edition undertook a new attempt, using the latest available information about future consumption, available reserves etc., to try to estimate the time that is left to the world economy before the oil and natural gas reserves are exhausted and practicable and acceptable alternatives must have been found to replace them. It is further investigated whether such alternatives exist.

Next to worrying about the prices of petroleum and the lifetime of the reserves, governments had to focus their attention on CO_2 -emissions caused by the use of oil and natural gas and to make a start with taking measures and formulating policies which should help or which were thought to be necessary to reduce said emissions and so to fulfil the commitments accepted by them in this regard under the Kyoto Protocol (effective 16 February 2005). The often conflicting policy options open to

governments and the consequences, if any, for both oil and natural gas and the petroleum industry are reviewed and discussed.

In the intervening years, governments have been active in further developing petroleum legislation although the changes introduced have not led to any significant difference with the systems and provisions described in the first edition. Nonetheless, legislation or contracts referred to and presented in the first edition as examples of 'current' legislation or contracts have been kept still 'current' by including in the second edition any changes and additions that were found to have been made thereto over the last years.

Finally, the text of the second edition has been restructured, subjects have been rearranged in different chapters, the chapter 'on Government Policies' has completely been rewritten and the chapter 'on Production Economics' has been deleted and replaced by a new chapter 'on Charters and Interstate Agreements'. To the latter, a description and discussion of the 1959 Treaty on Antarctica and its Protocol of 1991 have been added.

Leidschendam, The Netherlands April 2008

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