

1984

**JAPAN PETROLEUM INDUSTRY
YEARBOOK**

JAPAN INTERNATIONAL CONSULTANTS, LTD.

Copyright © 1984

by Japan International Consultants, Ltd.
Nihon Kokusai Konsarutanto, K.K.

All rights reserved. No part of this book may be reproduced in any form or by any electronic or mechanical means including information storage and retrieval systems without written permission from the publisher or original sources, except by a reviewer who may quote brief passages in a review.

ISBN 4-930988-03-9

Previous Edition: 1983

Published by
Japan International Consultants, Ltd.
2-5-19 Sekimae, Musashinoshi, Tokyo, JAPAN

John Victor Gano, Editor

Printed in Japan

ACKNOWLEDGEMENT OF SOURCES

The data contained in this book are authoritative statistics from the Ministry of International Trade and Industry, the Ministry of Finance, and the Prime Minister's Office of the Government of Japan, except where specified otherwise. In addition to this government data, helpful supplemental information was obtained from the Petroleum Association of Japan, the Japan National Oil Corporation, and the Bank of Japan. The great majority of the tables in this book are directly from or derived from Ministry of International Trade and Industry statistics and publications, but Table 9 is from the Japan National Oil Corporation, Tables 22 through 25 are directly from or derived from Ministry of Finance statistics and publications, Table 47 is from Bank of Japan sources, and Table 48 is from the Prime Minister's Office.

TABLE OF CONTENTS

List of Tables	7
Introduction	11
Chapter 1	
Government Petroleum Policy	15
Chapter 2	
Exploration and Development	37
Chapter 3	
Crude Oil and Petroleum Product Imports and Exports	69
Chapter 4	
Refining, Distribution and Marketing Activities	195
COMPANY DIRECTORY	271

List of Tables

14. Crude Imports by Source: Mideast (kl)	90
15. Crude Imports by Source: Asia (kl)	96
16. Crude Imports by Source: Americas (kl)	100
17. Crude Imports by Source: Africa (kl)	102
18. Crude Imports by Source: Mideast (bbl)	106
19. Crude Imports by Source: Asia (bbl)	112
20. Crude Imports by Source: Americas (bbl)	116
21. Crude Imports by Source: Africa (bbl)	118
22. Crude, Naphtha, Fuel Oil Import Prices	122
23. Crude and Naphtha Prices by Month	124
24. Fuel Oil Prices by Month	126
25. Crude Oil Prices by Country	128
26. Key Crude Oil Prices	130
27. Product Imports by Country: 1981	134
28. Product Imports by Country: 1982	144
29. Product Imports by Country: 1983	154
30. Product Exports by Country: 1981	164
31. Product Exports by Country: 1982	174
32. Product Exports by Country: 1982	184
33. Stockpile Levels	194

Chapter 4: Refining and Sales

34. Petroleum Product Mix	205
35. Product Yields of Leading Crudes	206
36. Total Refining Capacity	208
37. Refining and Sales Shares by Group	210
38. Refining Capacity by Companies	212
39. Financial Results of Petroleum Industry	220
40. Ranking of Oil Companies	222
41. Refiners' Investment Plans	228

LIST OF TABLES

Chapter 1: Government Petroleum Policy

1. Petroleum Import Costs as a Percentage of Total Import Costs	17
2. Primary Energy Source Mix, 1983	18
3. Long Term Energy Supply/Demand Forecast	22
4. 1984 Medium Term Petroleum Supply Plan	28
5. 1984 Oil and LPG Stockpile Guidelines	31

Chapter 2: Exploration and Development

6. Japanese Exploration and Development Projects on the Continental Shelf	44
7. Domestic Crude Oil Production	52
8. Overseas Exploration and Development Projects	54
9. Crude Imports from Japanese Producers Overseas	66

Chapter 3: Imports and Exports

10. Leading Crude Supply Sources	76
11. Crude Imports by Companies and Groups	78
12. Crude Imports by Country (kiloliters)	82
13. Crude Imports by Country (barrels)	86

List of Tables

42. Recent Product Demand	230
43. Petroleum Product Demand Forecast	232
44. Petroleum Product Supply and Demand: 1981	234
45. Petroleum Product Supply and Demand: 1982	240
46. Petroleum Product Supply and Demand: 1983	246
47. Wholesale Product Prices	252
48. Retail Product Prices	256
49. Product Consumption by Industrial Sector: 1981	258
50. Product Consumption by Industrial Sector: 1982	260
51. Product Consumption by Industrial Sector: 1983	262
52. Fuel Oil Consumption by Industrial Sector: 1981	264
53. Fuel Oil Consumption by Industrial Sector: 1982	266
54. Fuel Oil Consumption by Industrial Sector: 1983	268

INTRODUCTION

The global surplus of crude oil supplies and the subsequent declines in crude oil prices which marked 1983 and 1984 were a major relief to the world economy, and the Japanese economy, which is so highly dependent on imported oil and exported products, benefitted particularly from these conditions. Japan's recent trends towards declining petroleum product demand and declining crude oil imports were reversed as a direct result of these factors during the latest fiscal year, and its key energy policy forecasts were modified to include a larger role for petroleum than had recently been thought to be possible.

Yet not all was changed by the falling prices; in fact, the major trends and problems of the Japanese petroleum market and petroleum industry have persisted despite these favorable changes. Overall demand for petroleum products and total crude oil imports are still projected to decline in the future, while the Japanese petroleum industry continued to experience such severe financial difficulties that it has begun a process of fundamental restructuring under a government-sponsored plan.

The 1984 Japan Petroleum Industry Yearbook covers the diverse aspects and activities of the Japanese petroleum industry and its governmental regulatory system during fiscal year 1983, which ended on March 31, 1984, through the medium of official government and industry statistics.

Introduction

This book is designed to serve as a handy yet comprehensive reference work for readers ranging from industry executives to researchers and energy economists, so some compromises in its format have been necessary. Readers will profit by keeping the following points in mind.

The List of Tables on the preceding pages is the quickest means of accessing the data in this Yearbook.

The yen/dollar conversion factor used in this edition of the Yearbook is ¥240 to \$1.00.

The Japanese government and most oil companies operate on the fiscal year from April 1 to March 31 of the following calendar year. The Yearbook covers data up to the end of fiscal 1983 in March 1984, but all data not specified as fiscal year data is for calendar years.

The careful reader may notice that the totals in some tables do not tally with the sums listed. Here the Yearbook is following the statistics of the original government sources rather than its own addition. While the general level of statistical accuracy in these sources is very high, adjustments are sometimes made in subsequent years, and the Yearbook reports the latest official figures.

Finally, while the text of this Yearbook describes and analyses the events of the preceding year, the reader can find a much more detailed description and analysis of the Japanese governmental regulatory system for the petroleum industry in a special feature section of the 1983 Japan Petroleum Industry Yearbook.

John Victor Gano

Tokyo

THE JAPAN PETROLEUM INDUSTRY YEARBOOK

1984

Chapter 1

PETROLEUM POLICY

Introduction

It is easy to say that Japan depends on imports to supply 99.8 percent of its crude oil demand. But the massive volume of its industrial economy's demand for these crude oil imports is better illustrated by the fact that OPEC's \$5 per barrel price cut alone saved Japan an estimated \$6.25 billion in foreign exchange. Even with the world-wide declines in crude oil prices which followed the OPEC benchmark price cut, the sums which Japan had to pay for its petroleum imports in fiscal year 1983 (ending March 31, 1984) accounted for 37.59 percent of its total import costs, and three years earlier this figure was 43.37 percent.

Yet Japan has made great progress in diversifying its energy sources during the decade since the first oil crisis, and while oil supplied a peak level of 77.6 percent of Japan's total energy demand in fiscal 1973, this figure was reduced to 61.6 percent only nine years later. Japan's degree of oil dependence is still high in comparison to that of the other industrialized countries, but petroleum's share of Japan's total energy supply is forecast to

fall to about 42 percent by the year 2,000 and this level would compare quite favorably with those of the other industrial nations.

The slowing of the world economy since the second oil shock in 1979, the success of world wide energy conservation and diversification efforts, the discovery and development of new petroleum reserves around the world, and the resulting oil glut and price cuts have dramatically altered the conditions of the global petroleum industry in the past few years. These changing oil market conditions have benefitted the Japanese economy, but for the Japanese petroleum industry with its unique problems, these changes have not been kind.

The Japanese petroleum industry was in a time of crisis from 1983 to early 1984. Its traditionally weak financial base could not continue to support the massive burden of simultaneously financing the country's petroleum imports and investing in new upgrading refining capacity at a time when domestic demand for petroleum products was in a long-term downtrend and severe competition in the retail marketplace was driving prices down towards bare costs.

The industry knew that it had to reform its fundamental structure in order to rehabilitate itself. Banks, shareholders, and the government were demanding it. The steps which it is presently taking towards this goal are difficult, but they bring the hope of assuring the stability and vitality of this crucial Japanese industry in the years to come.

This chapter outlines the Japanese government's response to these new conditions as