

**Abstract**  
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**PETROLEUM INDUSTRY OUTLOOK**  
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Global energy demand is rising, with fossil fuels—oil, natural gas, and coal—continuing to provide more than 90% of the world's energy needs. Although demand for natural gas is growing faster than that for oil, oil remains the dominant fuel because it is relatively inexpensive and easily transported. World oil demand reached a record level of 72 million b/d in 1997 and is projected to increase to 91 million b/d by 2010. In the 3 major consuming regions of North America, Europe, and the Asia-Pacific, oil production is expected to be stable at best, and oil imports are expected to rise from 25 million to 42 million b/d. Most of the increase in oil exports after 2000 will originate in the Middle East whose oil reserves can easily support the higher output.

The array of environmental issues, ranging from local air quality to global climate change, will play a significant role in the energy industry's future. Alternative and especially renewable energy sources will be increasingly favored in the longer term. The global trend toward cleaner fuels (gasoline and diesel) is proceeding faster than many had anticipated, with tightening requirements on parameters such as sulfur, benzene, oxygen, and olefins content, as well as evaporative qualities and other aspects.

To meet future demand for lighter and cleaner products, including demand for petrochemical feedstocks, which is growing faster than demand for fuel products, new refinery capacity is being built. Investment is focused in the growth markets of the Asia-Pacific, South America, and the Middle East. At the same time, the world refining industry has faced years of low profits and is undergoing significant consolidation, with numerous major joint ventures, mergers, and alliances announced since 1996. For maximum efficiency and profitability, refiners need to align their technology configurations with regional product demand. Given announced capacity additions in Asia-Pacific, which is experiencing lower than expected demand, we foresee the potential for excess gasoline production capacity in that region. Europe has faced similar product imbalances for years, which have tended to depress prices and contribute to lower refinery profitability in that region.

Given that an understanding of world oil markets is essential for knowledge of petrochemical feedstocks, this compendium of petroleum market data and analysis for all regions of the world will be of interest to those in the energy and petrochemical industries.

## CONTENTS

GLOSSARY .....	xiii
1 INTRODUCTION .....	1-1
2 SUMMARY .....	2-1
GLOBAL POPULATION AND ECONOMIC ACTIVITY .....	2-1
WORLD ENERGY .....	2-2
ALTERNATIVE FUELS .....	2-2
WORLD OIL AND GAS.....	2-4
Reserves .....	2-4
World Oil .....	2-4
World Gas .....	2-7
WORLD OIL PRODUCTS.....	2-7
WORLD NAPHTHA BALANCE .....	2-9
FUEL PRODUCT QUALITY .....	2-10
WORLD PETROLEUM REFINING .....	2-12
World Refinery Capacity Use .....	2-12
World Refinery Capacity .....	2-13
3 WORLD ENERGY .....	3-1
THE WORLD ECONOMY .....	3-1
WORLD ENERGY OUTLOOK .....	3-4
Energy Conservation.....	3-4
Energy Use by Type.....	3-7
ALTERNATIVE FUEL OUTLOOK .....	3-9
Background.....	3-9
Alternative Fuel Status.....	3-10
Reformulated Gasoline .....	3-10
CNG .....	3-11
Propane.....	3-12
Biofuels .....	3-13
Synfuels .....	3-13
Electric Vehicles .....	3-13
Fuel Cell Vehicles.....	3-14
Hydrogen.....	3-14

## CONTENTS (Continued)

4	WORLD OIL AND GAS.....	4-1
	WORLD OIL OVERVIEW .....	4-1
	Oil Reserves.....	4-2
	Oil Demand.....	4-5
	Oil Supply .....	4-8
	Non-OPEC Production.....	4-16
	OPEC Production .....	4-18
	WORLD NATURAL GAS OVERVIEW .....	4-18
	Gas-to-Liquids Technology.....	4-29
5	WORLD OIL PRODUCTS.....	5-1
	PRODUCT DEFINITIONS.....	5-1
	OIL PRODUCTS SUPPLY AND DEMAND.....	5-2
	World Oil Products.....	5-2
	LPG/Ethane.....	5-5
	Gasoline .....	5-5
	Middle Distillates.....	5-7
	RFO .....	5-7
	World Naphtha Balance .....	5-8
	North American Oil Products.....	5-12
	European Oil Products .....	5-18
	Asia-Pacific Oil Products.....	5-22
	FSU Oil Products.....	5-27
	South and Central America Oil Products.....	5-31
	Middle Eastern Oil Products.....	5-35
	African Oil Products .....	5-39
6	FUEL PRODUCT QUALITY .....	6-1
	U.S. REGULATIONS .....	6-2
	Gasoline .....	6-2
	The 1990 Clean Air Act Amendments (CAAA) .....	6-2
	California RFG.....	6-6
	Diesel and Fuel Oil .....	6-7

## CONTENTS (Continued)

6	FUEL PRODUCT QUALITY (Concluded)	
	EU REGULATIONS .....	6-7
	Gasoline .....	6-7
	Lead Phase-out .....	6-7
	Gasoline Reformulation .....	6-8
	Diesel Fuel.....	6-11
	RFO.....	6-12
	ASIA-PACIFIC REGULATIONS .....	6-13
	Gasoline .....	6-13
	Lead Phase-out .....	6-13
	Gasoline Reformulation .....	6-14
	Middle Distillates.....	6-15
7	WORLD PETROLEUM REFINING .....	7-1
	REFINING INDUSTRY TRENDS .....	7-1
	World Refinery Capacity Use .....	7-4
	North America.....	7-6
	Europe.....	7-7
	Asia-Pacific.....	7-8
	Japan .....	7-9
	China.....	7-10
	India .....	7-10
	South Korea.....	7-11
	Singapore .....	7-11
	Thailand .....	7-11
	Taiwan.....	7-11
	South and Central America .....	7-12
	The Middle East.....	7-12
	REFINING TECHNOLOGY .....	7-12
	Crude Oil Disposition .....	7-14
	Octane Enhancement .....	7-15
	Hydrotreating .....	7-15
	Gas Oil Conversion.....	7-15
	FCC.....	7-15
	Hydrotreating.....	7-16

## CONTENTS (Concluded)

7	WORLD PETROLEUM REFINING (Concluded)	
	Residue Upgrading .....	7-16
	Coking .....	7-16
	Thermal Cracking and Visbreaking .....	7-16
	WORLD REFINERY CAPACITY .....	7-16
	Distillation Capacity .....	7-17
	Refinery Configurations.....	7-20
	Gasoline Composition.....	7-25

### APPENDIXES

- A CITED REFERENCES
- B WORLD SUPPLY AND DEMAND OF PETROLEUM PRODUCTS, 1990-2010
- C WORLD OIL REFINING STRUCTURE, 1990-2010

## FIGURES

2.1	World Primary Energy Demand as a Function of Economic Activity, 1950-2010 .....	2-3
2.2	World Oil Demand by Region, 1990-2010 .....	2-5
2.3	World Oil Production by Region, 1990-2010.....	2-6
2.4	Net World Oil Trade, 1990-2010 .....	2-6
2.5	World Natural Gas Production and Demand, 1997 .....	2-7
2.6	Regional Oil Product Demand, 1996 .....	2-8
2.7	World Naphtha Balance, 1990-2010.....	2-10
2.8	Refinery Capacity Use in Major Regions, 1977-1997.....	2-12
2.9	World Refinery Capacity, 1990-2010.....	2-13
2.10	Cracking Capacity Versus Gasoline Production in Major Regions, 1995.....	2-14
3.1	World Economic Growth Rates, 1970-2010.....	3-1
3.2	World Economic Activity, 1995-2010 .....	3-3
3.3	World Population Distribution, 1995-2010 .....	3-3
3.4	World GDP per Capita, 1995-2010.....	3-4
3.5	World Primary Energy Demand as a Function of Economic Activity, 1995-2010 .....	3-5
3.6	Trend in World Energy Intensity, 1950-2010 .....	3-6
3.7	Energy Intensity in Major World Regions, 1995-2010 .....	3-6
3.8	World Energy Use, 1990-2010 .....	3-7
3.9	Energy Use in North America, 1990-2010 .....	3-8
3.10	Energy Use in Europe, 1990-2010.....	3-8
3.11	Energy Use in Asia-Pacific, 1990-2010 .....	3-9
4.1	World Proven Crude Oil Reserves, 1975-1995.....	4-4
4.2	OPEC and Non-OPEC Crude Oil Reserves, 1975-1995.....	4-5
4.3	World Oil Demand by Region, 1990-2010.....	4-8
4.4	World Oil Production by Region, 1990-2010.....	4-15
4.5	Net World Oil Trade, 1990-2010 .....	4-16
4.6	World Oil Production, 1990-2010 .....	4-17
4.7	World Natural Gas Production and Demand in 1997 .....	4-27
4.8	Natural Gas Pipeline and LNG Imports in 1997 .....	4-28
4.9	Natural Gas Pipeline and LNG Exports in 1997.....	4-28
5.1	World Refined Product Demand, 1990-2010 .....	5-3
5.2	Regional Oil Product Demand in 1996 .....	5-4
5.3	Regional Oil Product Demand in 2010 .....	5-4

5.4	Incremental World Gasoline Demand and Production, 1990-2010.....	5-6
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**FIGURES (Continued)**

5.5	Comparison of World Gasoline Demand and Production Estimates, 1990-2010.....	5-6
5.6	RFO Demand in North America, Europe, and Asia-Pacific, 1990-2010.....	5-7
5.7	World Naphtha Balance, 1990-2010.....	5-11
5.8	World Naphtha and Gasoline Relative Demand Growth, 1990-2010.....	5-11
5.9	Naphtha Trade by Major Region, 1990-2010 .....	5-12
5.10	North America: Gasoline, Middle Distillate, and RFO Demand , 1990-2010 .....	5-13
5.11	North America: Product Net Imports, 1990-2010 .....	5-14
5.12	North America: Naphtha Balance, 1990-2010.....	5-17
5.13	Europe: Gasoline, Middle Distillate, and RFO Demand , 1990-2010.....	5-18
5.14	Europe: Product Net Imports, 1990-2010 .....	5-19
5.15	Europe: Naphtha Balance, 1990-2010.....	5-22
5.16	Asia-Pacific: Gasoline, Middle Distillate, and RFO Demand , 1990-2010 .....	5-23
5.17	Asia-Pacific: Product Net Imports, 1990-2010 .....	5-24
5.18	Asia-Pacific: Naphtha Balance, 1990-2010.....	5-27
5.19	FSU: Gasoline, Middle Distillate, and RFO Demand, 1990-2010.....	5-27
5.20	FSU: Product Net Imports, 1990-2010.....	5-28
5.21	FSU: Naphtha Balance, 1990-2010.....	5-30
5.22	South and Central America: Gasoline, Middle Distillate, and RFO Demand, 1990-2010.....	5-32
5.23	South and Central America: Product Net Imports, 1990-2010.....	5-32
5.24	South and Central America: Naphtha Balance, 1990-2010.....	5-35
5.25	Middle East: Gasoline, Middle Distillate, and RFO Demand, 1990-2010.....	5-35
5.26	Middle East: Product Net Imports, 1990-2010 .....	5-36
5.27	Middle East: Naphtha Balance, 1990-2010.....	5-39
5.28	Africa: Gasoline, Middle Distillate, and RFO Demand, 1990-2010.....	5-39
5.29	Africa: Product Net Imports, 1990-2010 .....	5-40
5.30	Africa: Naphtha Balance, 1990-2010.....	5-43
6.1	Chronology of U.S. Gasoline Regulations .....	6-3
7.1	World Refinery Capacity and Throughput, 1977-1997 .....	7-5
7.2	Refinery Capacity Use in Major Regions, 1977-1997.....	7-5
7.3	United States: Refinery Capacity and Throughput, 1977-1997.....	7-6
7.4	Europe: Refinery Capacity and Throughput, 1977-1997 .....	7-7
7.5	Asia-Pacific: Refinery Capacity and Throughput, 1977-1997 .....	7-9

7.6	Schematic of a Typical Complex Fuels Refinery .....	7-13
7.7	World Refinery Capacity, 1990-2010.....	7-17

**FIGURES (Concluded)**

7.8	World Petroleum Refinery Capacity and Crude Oil Consumption, 1970-2010.....	7-20
7.9	Cracking Capacity versus Gasoline Production in Major Regions, 1995 .....	7-22
7.10	World Refinery Conversion Capacity, 1990-2010 .....	7-23
7.11	World Refinery Hydroprocessing Capacity, 1990-2010.....	7-24
7.12	World Refinery Catalytic Reforming Capacity, 1990-2010.....	7-24
7.13	World Gasoline Compositions, 1995 .....	7-25

## TABLES

2.1	Global Population and Economic Activity in 1995 versus 2010.....	2-1
2.2	World Primary Energy Use, 1990-2010.....	2-2
2.3	World Oil and Natural Gas Reserves in 1995.....	2-4
2.4	World Natural Gas and Crude Oil Reserves.....	2-4
2.5	World Oil Products Demand, 1995-2010.....	2-8
2.6	World Naphtha Balance, 1995-2010.....	2-9
2.7	Estimated U.S. and EU Gasoline Quality in 2000 and 2005.....	2-11
2.8	EU Diesel Requirements.....	2-11
3.1	Global Population and Economic Activity in 1995 versus 2010.....	3-2
3.2	Global Population and Economic Activity.....	3-16
3.3	Global Energy Demand, 1990-2010.....	3-20
3.4	Estimated U.S. Market Shares of Alternative Fuel Vehicles in 2020.....	3-10
4.1	World Primary Energy Use, 1990-2010.....	4-1
4.2	World Proven Crude Oil Reserves, 1975-1995.....	4-3
4.3	World Oil (Crude Oil and NGL) Demand, 1990-2010.....	4-6
4.4	World Oil (Crude Oil and NGL) Production, 1990-2010.....	4-9
4.5	World Natural Gas Reserves, 1975-1995.....	4-20
4.6	World Natural Gas Supply and Demand, 1990–1997.....	4-22
5.1	World Supply and Demand of Petroleum Products, 1990-2010.....	B-3
5.2	World Oil Products Demand, 1995-2010.....	5-3
5.3	World Gasoline Demand Growth, 1995-2010.....	5-5
5.4	World Middle Distillates Demand Growth, 1995-2010.....	5-7
5.5	World Naphtha Balance.....	5-9
5.6	North American Naphtha Balance.....	5-15
5.7	European Naphtha Balance.....	5-20
5.8	Asia-Pacific Naphtha Balance.....	5-25
5.9	FSU Naphtha Balance.....	5-29
5.10	South and Central American Naphtha Balance.....	5-33
5.11	Middle Eastern Naphtha Balance.....	5-37
5.12	African Naphtha Balance.....	5-41
6.1	U.S. Average Baseline (1990) Gasoline Parameters.....	6-4
6.2	Federal RFG Requirements.....	6-5
6.3	CARB RFG Requirements.....	6-6
6.4	Penetration of Unleaded Gasoline in Europe, 1997.....	6-8

## TABLES (Concluded)

6.5	Characteristics of European versus U.S. Vehicles and Fuels.....	6-9
6.6	Mandated EU Gasoline Quality in 2000 and 2005 .....	6-9
6.7	EU Directive Maximum Oxygenate Limits: Percent as MTBE.....	6-10
6.8	Swedish Environmental Gasoline.....	6-11
6.9	Finnish RFG .....	6-11
6.10	EU Diesel Requirements.....	6-12
6.11	Gasoline Lead Levels in Asia-Pacific .....	6-14
6.12	Diesel Sulfur Requirements in Asia-Pacific .....	6-15
7.1	Global Refining Industry Consolidation.....	7-2
7.2	Major Refining Processes .....	7-14
7.3	World Oil Refining Structure, 1990-2010.....	C-3
7.4	Announced Refinery Capacity Changes .....	7-19
7.5	Refinery Capacity by Region, 1997 .....	7-21
7.6	Increasing World Refinery Complexity .....	7-23