



## Petroleum and Petrochemical Economics

### Petrochemical Market Dynamics

Polyester & Intermediates  
December 2017



This Report was prepared by Nexant, Inc. ("Nexant") and is part of the NexantThinking™ suite. Except where specifically stated otherwise in this Report, the information contained herein is prepared on the basis of information that is publicly available, and contains no confidential third party technical information to the best knowledge of Nexant. Aforesaid information has not been independently verified or otherwise examined to determine its accuracy, completeness or financial feasibility. Neither Nexant, Subscriber nor any person acting on behalf of either assumes any liabilities with respect to the use of or for damages resulting from the use of any information contained in this Report. Nexant does not represent or warrant that any assumed conditions will come to pass.

The Report is submitted on the understanding that the Subscriber will maintain the contents confidential except for the Subscriber's internal use. The Report should not be reproduced, distributed or used without first obtaining prior written consent by Nexant. Each Subscriber agrees to use reasonable effort to protect the confidential nature of the Report.

Copyright © by Nexant Inc. 2018. All rights reserved.

# Contents

---

Section		Page
1	Executive Summary .....	1-1
1.1	INTRODUCTION.....	1-1
1.2	POLYESTER INDUSTRY .....	1-3
1.3	PET MELT PHASE.....	1-5
1.4	PET BOTTLE GRADE.....	1-7
1.5	MONO ETHYLENE GLYCOL (MEG).....	1-9
1.6	ETHYLENE OXIDE .....	1-11
1.7	PURIFIED TEREPHTHALIC ACID (PTA) .....	1-12
2	The Polyester Industry .....	2-1
2.1	INTRODUCTION.....	2-1
2.2	MARKET SUMMARY .....	2-2
2.2.1	Purified Terephthalic Acid (PTA) .....	2-4
2.2.2	Dimethyl Terephthalate (DMT).....	2-5
2.2.3	Ethylene Oxide (EO) .....	2-6
2.2.4	Mono Ethylene Glycol (MEG).....	2-6
2.2.5	PET Melt Phase .....	2-6
2.2.6	PET Bottle Grade .....	2-7
2.3	REPORT SCOPE .....	2-9
3	Purified Terephthalic Acid (PTA) .....	3-1
3.1	GLOBAL .....	3-1
3.1.1	Key Developments .....	3-1
3.1.2	Consumption .....	3-1
3.1.3	Supply.....	3-4
3.1.4	Supply and Demand.....	3-7
3.2	NORTH AMERICA .....	3-10
3.2.1	Key Developments .....	3-10
3.2.2	Consumption .....	3-10
3.2.3	Supply.....	3-12
3.2.4	Supply, Demand and Trade .....	3-15
3.3	SOUTH AMERICA .....	3-18
3.3.1	Key Developments .....	3-18
3.3.2	Consumption .....	3-18

3.3.3	Supply.....	3-19
3.3.4	Supply, Demand and Trade .....	3-20
3.4	WESTERN EUROPE .....	3-21
3.4.1	Key Developments .....	3-21
3.4.2	Consumption .....	3-21
3.4.3	Supply.....	3-22
3.4.4	Supply, Demand and Trade .....	3-25
3.5	CENTRAL AND EASTERN EUROPE.....	3-27
3.5.1	Central Europe .....	3-27
3.5.2	Eastern Europe .....	3-30
3.6	MIDDLE EAST AND AFRICA.....	3-36
3.6.1	Middle East.....	3-36
3.6.2	Africa .....	3-41
3.7	ASIA PACIFIC .....	3-43
3.7.1	Key Developments .....	3-43
3.7.2	Consumption .....	3-43
3.7.3	Supply.....	3-47
3.7.4	Supply, Demand and Trade .....	3-55
4	Dimethyl Terephthalate (DMT) .....	4-1
4.1	GLOBAL .....	4-1
4.1.1	Key Developments .....	4-1
4.1.2	Consumption .....	4-1
4.1.3	Supply.....	4-4
4.1.4	Supply and Demand.....	4-7
5	Ethylene Oxide (EO) .....	5-1
5.1	GLOBAL .....	5-1
5.1.1	Key Developments .....	5-1
5.1.2	Consumption .....	5-1
5.1.3	Supply.....	5-4
5.1.4	Supply and Demand.....	5-6
5.2	NORTH AMERICA .....	5-8
5.2.1	Key Developments .....	5-8
5.2.2	Consumption .....	5-8
5.2.3	Supply.....	5-10
5.2.4	Supply, Demand and Trade .....	5-13
5.3	SOUTH AMERICA .....	5-15

5.3.1	Key Developments .....	5-15
5.3.2	Consumption .....	5-15
5.3.3	Supply.....	5-17
5.3.4	Supply, Demand and Trade .....	5-19
5.4	WESTERN EUROPE .....	5-20
5.4.1	Key Developments .....	5-20
5.4.2	Consumption .....	5-20
5.4.3	Supply.....	5-22
5.4.4	Supply, Demand and Trade .....	5-25
5.5	EASTERN AND CENTRAL EUROPE.....	5-27
5.5.1	Central Europe .....	5-27
5.5.2	Eastern Europe .....	5-30
5.6	MIDDLE EAST AND AFRICA.....	5-35
5.6.1	Middle East.....	5-35
5.6.2	Africa .....	5-41
5.7	ASIA PACIFIC .....	5-43
5.7.1	Key Developments .....	5-43
5.7.2	Consumption .....	5-43
5.7.3	Supply.....	5-47
5.7.4	Supply, Demand and Trade .....	5-54
6	Mono Ethylene Glycol (MEG).....	6-1
6.1	GLOBAL .....	6-1
6.1.1	Key Developments .....	6-1
6.1.2	Consumption .....	6-1
6.1.3	Supply.....	6-3
6.1.4	Supply, Demand and Trade .....	6-6
6.2	NORTH AMERICA .....	6-9
6.2.1	Key Developments .....	6-9
6.2.2	Consumption .....	6-9
6.2.3	Supply.....	6-11
6.2.4	Supply, Demand and Trade .....	6-14
6.3	SOUTH AMERICA .....	6-17
6.3.1	Key Developments .....	6-17
6.3.2	Consumption .....	6-17
6.3.3	Supply.....	6-19
6.3.4	Supply, Demand and Trade .....	6-21

6.4	WESTERN EUROPE .....	6-23
6.4.1	Key Developments .....	6-23
6.4.2	Consumption .....	6-23
6.4.3	Supply.....	6-24
6.4.4	Supply, Demand and Trade .....	6-27
6.5	EASTERN AND CENTRAL EUROPE.....	6-28
6.5.1	Central Europe .....	6-28
6.5.2	Eastern Europe .....	6-31
6.6	MIDDLE EAST AND AFRICA.....	6-37
6.6.1	Middle East.....	6-37
6.6.2	Africa .....	6-44
6.7	ASIA PACIFIC .....	6-47
6.7.1	Key Developments .....	6-47
6.7.2	Overview.....	6-47
6.7.3	Consumption .....	6-47
6.7.4	Supply.....	6-50
6.7.5	Supply, Demand and Trade .....	6-58
7	PET Melt Phase.....	7-1
7.1	GLOBAL .....	7-1
7.1.1	Key Developments .....	7-1
7.1.2	Consumption .....	7-1
7.1.3	Supply.....	7-5
7.1.4	Supply, Demand and Trade .....	7-8
7.2	NORTH AMERICA .....	7-11
7.2.1	Key Developments .....	7-11
7.2.2	Consumption .....	7-11
7.2.3	Supply.....	7-14
7.2.4	Supply, Demand and Trade .....	7-16
7.3	SOUTH AMERICA .....	7-19
7.3.1	Key Developments .....	7-19
7.3.2	Consumption .....	7-19
7.3.3	Supply.....	7-21
7.3.4	Supply, Demand and Trade .....	7-24
7.4	WESTERN EUROPE .....	7-25
7.4.1	Key Developments .....	7-25
7.4.2	Consumption .....	7-25

7.4.3	Supply.....	7-27
7.4.4	Supply, Demand and Trade .....	7-31
7.5	EASTERN AND CENTRAL EUROPE.....	7-33
7.5.1	Central Europe .....	7-33
7.5.2	Key Developments .....	7-33
7.5.3	Eastern Europe .....	7-36
7.5.4	Key Developments .....	7-36
7.6	MIDDLE EAST AND AFRICA.....	7-44
7.6.1	Middle East.....	7-44
7.6.2	Key Developments .....	7-44
7.6.3	Africa .....	7-50
7.7	ASIA PACIFIC .....	7-55
7.7.1	Key Developments .....	7-55
7.7.2	Consumption .....	7-55
7.7.3	Supply.....	7-60
7.7.4	Supply, Demand and Trade .....	7-74
8	PET Bottle Grade .....	8-1
8.1	GLOBAL .....	8-1
8.1.1	Key Developments .....	8-1
8.1.2	Consumption .....	8-1
8.1.3	Supply.....	8-5
8.1.4	Supply, Demand and Trade .....	8-8
8.2	NORTH AMERICA .....	8-11
8.2.1	Key Developments .....	8-11
8.2.2	Consumption .....	8-11
8.2.3	Supply.....	8-12
8.2.4	Supply, Demand and Trade .....	8-15
8.3	SOUTH AMERICA .....	8-18
8.3.1	Key Developments .....	8-18
8.3.2	Consumption .....	8-18
8.3.3	Supply.....	8-19
8.3.4	Supply, Demand and Trade .....	8-21
8.4	WESTERN EUROPE .....	8-23
8.4.1	Key Developments .....	8-23
8.4.2	Consumption .....	8-23
8.4.3	Supply.....	8-24

8.4.4	Supply, Demand and Trade .....	8-27
8.5	CENTRAL AND EASTERN EUROPE .....	8-29
8.5.1	Central Europe .....	8-29
8.5.2	Eastern Europe .....	8-32
8.6	MIDDLE EAST AND AFRICA.....	8-40
8.6.1	Middle East.....	8-40
8.6.2	Africa .....	8-45
8.7	ASIA PACIFIC .....	8-49
8.7.1	Key Developments .....	8-49
8.7.2	Consumption .....	8-49
8.7.3	Supply.....	8-52
8.7.4	Supply, Demand and Trade .....	8-60

<b>Appendix</b>		<b>Page</b>
A	Methodology .....	A-1
B	The Polyester Industry - Technology .....	B-1

<b>Figure</b>		<b>Page</b>
2.1	Polyester Chain Molecules .....	2-8
2.2	The Polyester Chain .....	2-8
3.1	Global PTA Demand, 2017-e .....	3-2
3.2	Global GDP Growth vs. PTA Consumption Growth .....	3-3
3.3	Global PTA Consumption by Region .....	3-3
3.4	Global PTA Capacity Share by Marketer in 2017-e .....	3-5
3.5	Global PTA Capacity Additions/(Closures) .....	3-6
3.6	Global PTA Capacity .....	3-6
3.7	Global PTA Supply and Demand .....	3-8
3.8	Global PTA Net Exports(Imports) .....	3-9
3.9	North America PTA Consumption, 2017-e .....	3-11
3.10	Location of PTA Plants in North America .....	3-14
3.11	North America PTA Supply, Demand and Trade .....	3-16
3.12	United States PTA Supply, Demand and Trade.....	3-17
3.13	Location of PTA Plants in South America .....	3-19
3.14	South America PTA Supply, Demand and Trade.....	3-20
3.15	Western Europe PTA Consumption, 2017-e .....	3-22

3.16 Location of PTA Plants in Western Europe .....	3-24
3.17 Western Europe PTA Supply, Demand and Trade .....	3-26
3.18 Location of PTA Plants in Central Europe .....	3-28
3.19 Central Europe PTA Supply, Demand and Trade .....	3-29
3.20 Location of PTA Plants in Russian .....	3-32
3.21 Russia PTA Supply, Demand and Trade .....	3-33
3.22 Other Eastern Europe PTA Supply, Demand and Trade .....	3-34
3.23 Total Eastern Europe PTA Supply, Demand and Trade .....	3-35
3.24 Location of PTA Plants in Middle East .....	3-38
3.25 Middle East PTA Supply, Demand and Trade .....	3-40
3.26 Africa PTA Supply, Demand and Trade .....	3-42
3.27 Asia Pacific PTA Consumption, 2017-e .....	3-46
3.28 Location of PTA Plants in China.....	3-53
3.29 Location of PTA Plants in Japan and South Korea.....	3-54
3.30 Location of PTA Plants in South-East Asia and Australia .....	3-54
3.31 Location of PTA Plants in India and Pakistan .....	3-55
3.32 Asia Pacific PTA Supply, Demand and Trade.....	3-57
3.33 China PTA Supply, Demand and Trade .....	3-58
4.1 Global DMT Demand, 2017-e .....	4-2
4.2 Global GDP Growth vs. DMT Consumption Growth .....	4-2
4.3 Global DMT Consumption .....	4-3
4.4 Global DMT Capacity Share in Marketer in 2017-e .....	4-4
4.5 Global DMT Capacity Additions/(Closures).....	4-5
4.6 Global DMT Capacity .....	4-5
4.7 Location of DMT Plants .....	4-7
4.8 Global DMT Supply and Demand.....	4-8
4.9 Global DMT Net Exports(Imports) .....	4-9
5.1 Global Ethylene Oxide Demand, 2017-e.....	5-2
5.2 Global GDP Growth vs. Ethylene Oxide Consumption Growth .....	5-2
5.3 Global Ethylene Oxide Consumption .....	5-3
5.4 Global Ethylene Oxide Capacity Share by Marketer in 2017-e.....	5-4
5.5 Global Ethylene Oxide Capacity Additions(Closures) .....	5-5
5.6 Global Ethylene Oxide Capacity.....	5-5
5.7 Global EO Supply and Demand .....	5-6
5.8 Global EO Net Exports(Imports).....	5-7
5.9 North America Ethylene Oxide Consumption, 2017-e .....	5-9

5.10	Location of Ethylene Oxide Plants in North America .....	5-12
5.11	Location of Ethylene Oxide Plants in the USGC .....	5-12
5.12	North America Ethylene Oxide Supply, Demand and Trade.....	5-13
5.13	United States Ethylene Oxide Supply, Demand and Trade .....	5-14
5.14	South America Ethylene Oxide Consumption, 2017-e.....	5-16
5.15	Location of EO Plants in South America .....	5-18
5.16	South America EO Supply, Demand and Trade .....	5-19
5.17	Western Europe Ethylene Oxide Consumption, 2017-e .....	5-21
5.18	Location of Ethylene Oxide Plants in Western Europe .....	5-24
5.19	Western Europe Ethylene Oxide Supply, Demand and Trade.....	5-26
5.20	Central Europe Ethylene Oxide Consumption, 2017-e .....	5-27
5.21	Location of Ethylene Oxide Plants in Central Europe .....	5-28
5.22	Central Europe EO Supply, Demand and Trade.....	5-29
5.23	Russia Ethylene Oxide Consumption, 2017-e .....	5-30
5.24	Location of Ethylene Oxide Plants in Eastern Europe .....	5-32
5.25	Russia EO Supply, Demand and Trade .....	5-33
5.26	Total Eastern Europe EO Supply, Demand and Trade .....	5-34
5.27	Middle East Ethylene Oxide Consumption, 2017-e.....	5-36
5.28	Location of EO Plants in the Middle East.....	5-39
5.29	Middle East Ethylene Oxide Supply, Demand and Trade .....	5-40
5.30	Africa Ethylene Oxide Supply, Demand and Trade.....	5-42
5.31	Asia Pacific Ethylene Oxide Consumption, 2017-e.....	5-46
5.32	Location of Ethylene Oxide Plants in China .....	5-52
5.33	Location of Ethylene Oxide Plants in Japan and South Korea .....	5-53
5.34	Location of Ethylene Oxide Plants in South-East Asia and Australia .....	5-53
5.35	Location of Ethylene Oxide Plants in India.....	5-54
5.36	Asia Pacific Ethylene Oxide Supply, Demand and Trade .....	5-55
5.37	China Ethylene Oxide Supply, Demand and Trade .....	5-56
6.1	Global MEG Demand, 2017-e .....	6-2
6.2	Global GDP Growth vs. MEG Consumption Growth .....	6-2
6.3	Global MEG Consumption by Region .....	6-3
6.4	Global MEG Capacity Share by Marketer in 2017-e .....	6-4
6.5	Global MEG Capacity Additions/(Closures) .....	6-5
6.6	Global MEG Capacity .....	6-5
6.7	Global MEG Supply, Demand and Trade.....	6-7
6.8	Global MEG Trade .....	6-8

6.9	North America MEG Consumption, 2017-e.....	6-10
6.10	Location of MEG Plants in North America.....	6-13
6.11	Location of MEG Plants in the USGC .....	6-13
6.12	North America MEG Supply, Demand and Trade .....	6-15
6.13	United States MEG Supply, Demand and Trade .....	6-16
6.14	South America MEG Consumption, 2017-e .....	6-18
6.15	Location of MEG Plants in South America .....	6-20
6.16	South America MEG Supply, Demand and Trade .....	6-22
6.17	Western Europe MEG Consumption, 2017-e.....	6-24
6.18	Location of MEG Plants in Western Europe.....	6-26
6.19	Western Europe MEG Supply, Demand and Trade .....	6-27
6.20	Central Europe MEG Consumption, 2017-e .....	6-28
6.21	Location of MEG Plants in Central Europe .....	6-29
6.22	Central Europe MEG Supply, Demand and Trade.....	6-30
6.23	Russia MEG Consumption, 2017-e.....	6-31
6.24	Location of MEG Plants in Russia.....	6-33
6.25	Russia MEG Supply, Demand and Trade .....	6-34
6.26	Other Eastern European MEG Supply, Demand and Trade .....	6-35
6.27	Total Eastern European MEG Supply, Demand and Trade .....	6-36
6.28	Middle East MEG Consumption, 2017-e .....	6-38
6.29	Location of MEG Plants in the Middle East .....	6-41
6.30	Middle East MEG Supply, Demand and Trade .....	6-43
6.31	Africa MEG Consumption, 2017-e .....	6-44
6.32	Africa MEG Supply, Demand and Trade .....	6-46
6.33	Asia Pacific MEG Consumption, 2017-e .....	6-49
6.34	Location of MEG Plants in China .....	6-56
6.35	Location of MEG Plants in Japan and South Korea.....	6-57
6.36	Location of MEG Plants in South-East Asia and Australia.....	6-57
6.37	Location of MEG Plants in India .....	6-58
6.38	Asia Pacific MEG Supply, Demand and Trade .....	6-60
6.39	China MEG Supply, Demand and Trade.....	6-61
7.1	Global PET Melt Phase Demand, 2017-e .....	7-2
7.2	Global GDP Growth vs. PET Melt Phase Consumption Growth .....	7-4
7.3	Global PET Melt Phase Consumption.....	7-4
7.4	Global PET Melt Phase Capacity Share by Marketer in 2017-e .....	7-5
7.5	Global PET Melt Phase Capacity Additions/(Closures) .....	7-6

7.6	Global PET Melt Phase Capacity .....	7-6
7.7	Global PET Melt Phase Supply, Demand and Trade.....	7-9
7.8	Global PET Melt Phase Net Exports(Imports).....	7-10
7.9	North America PET Melt Phase Consumption, 2017-e.....	7-13
7.10	Location of PET Melt Phase Plants in North America.....	7-16
7.11	North America PET Melt Phase Supply, Demand and Trade .....	7-17
7.12	United States PET Melt Phase Supply, Demand and Trade .....	7-18
7.13	South America PET Melt Phase Consumption, 2017-e .....	7-20
7.14	Location of PET Melt Phase Plants in South America .....	7-23
7.15	South America Melt Phase Supply, Demand and Trade .....	7-24
7.16	Western Europe PET Melt Phase Consumption, 2017-e.....	7-26
7.17	Location of PET Melt Phase Plants in Western Europe.....	7-30
7.18	Western Europe PET Melt Phase Supply, Demand and Trade .....	7-32
7.19	Central Europe PET Melt Phase Consumption, 2017-e .....	7-33
7.20	Location of PET Melt Phase Plants in Central Europe .....	7-34
7.21	Central Europe PET Melt Phase Supply, Demand and Trade.....	7-35
7.22	Russia PET Melt Phase Consumption, 2017-e.....	7-36
7.23	Other Eastern Europe PET Melt Phase Consumption, 2017-e.....	7-37
7.24	Location of PET Melt Phase Plants in Russia.....	7-39
7.25	Location of PET Melt Phase Plants in Russia.....	7-39
7.25	Location of PET Melt Phase Plants in Other Eastern Europe.....	7-40
7.26	Russia PET Melt Phase Supply, Demand and Trade .....	7-41
7.27	Other Eastern Europe PET Melt Phase Supply, Demand and Trade .....	7-42
7.28	Total Eastern Europe PET Melt Phase Supply, Demand and Trade .....	7-43
7.29	Middle East PET Melt Phase Consumption, 2017-e .....	7-45
7.30	Location of PET Melt Phase Plants in Middle East .....	7-48
7.31	Middle East PET Melt Phase Supply, Demand and Trade .....	7-49
7.32	Africa PET Melt Phase Consumption, 2017-e.....	7-51
7.33	Location of PET Melt Phase Plants in Africa.....	7-53
7.34	Africa PET Melt Phase Supply, Demand and Trade .....	7-54
7.35	Asia Pacific PET Melt Phase Consumption, 2017-e .....	7-59
7.36	Location of PET Melt Plants in China.....	7-71
7.37	Location of PET Melt Plants in China.....	7-72
7.38	Location of PET Melt Plants in Japan and South Korea .....	7-72
7.39	Location of PET Melt Plants in South-East Asia and Australia .....	7-73
7.40	Location of PET Melt Plants in India and Pakistan .....	7-73

7.41 Asia Pacific PET Melt Phase Supply, Demand and Trade .....	7-75
7.42 China PET Melt Phase Supply, Demand and Trade.....	7-76
8.1 Global PET Bottle Grade Consumption by End-Use.....	8-3
8.2 Global PET Bottle Grade Consumption Growth.....	8-3
8.3 Global PET Bottle Grade Consumption .....	8-4
8.4 Global PET Bottle Grade Capacity Share by Marketer in 2017-e.....	8-6
8.5 Global PET Bottle Grade Capacity Additions/(Closures) .....	8-7
8.6 Global PET Bottle Grade Capacity.....	8-7
8.7 Global PET Bottle Grade Supply, Demand and Trade .....	8-9
8.8 Global PET Bottle Grade Net Exports(Imports) .....	8-10
8.9 Location of PET Bottle Grade Plants in North America.....	8-15
8.10 North America States PET Bottle Grade Supply, Demand and Trade.....	8-16
8.11 United States PET Bottle Grade Supply, Demand and Trade .....	8-17
8.12 Location of PET Bottle Grade Plants in South America.....	8-20
8.13 South America PET Bottle Grade Supply, Demand and Trade .....	8-22
8.14 Location of PET Bottle Grade Plants in Western Europe.....	8-26
8.15 Western Europe PET Bottle Grade Supply, Demand and Trade .....	8-28
8.16 Location of PET Bottle Grade Plants in Central Europe .....	8-30
8.17 Central Europe PET Bottle Grade Supply, Demand and Trade.....	8-31
8.18 Location of PET Bottle Grade Plants in Russia.....	8-34
8.19 Location of PET Bottle Grade Plants in Other Eastern Europe .....	8-35
8.20 Russia PET Bottle Grade Supply, Demand and Trade .....	8-37
8.21 Other Eastern European PET Bottle Grade Supply, Demand and Trade.....	8-38
8.22 Total Eastern European PET Bottle Grade Supply, Demand and Trade.....	8-39
8.23 Location of PET Bottle Grade Plants in Middle East.....	8-43
8.24 Middle East PET Bottle Grade Supply, Demand and Trade .....	8-44
8.25 Location of PET Bottle Grade Plants in Africa .....	8-47
8.26 Africa PET Bottle Grade Supply, Demand and Trade.....	8-48
8.27 Location of PET Bottle Grade Plants in China .....	8-57
8.28 Location of PET Bottle Grade Plants in Japan and South Korea.....	8-58
8.29 Location of PET Bottle Grade Plants in South-East Asia and Australia.....	8-58
8.30 Location of PET Bottle Grade Plants in India and Pakistan.....	8-59
8.31 Asia Pacific PET Bottle Grade Supply, Demand and Trade .....	8-61
8.32 China PET Bottle Grade Supply, Demand and Trade.....	8-62

Table		Page
3.1	Global PTA Consumption by Derivative.....	3-2
3.2	Global PTA Consumption by Region .....	3-4
3.3	Global PTA Supply and Demand .....	3-8
3.4	North America PTA Consumption by Derivative .....	3-11
3.5	North America PTA Consumption by Country.....	3-11
3.6	PTA Capacity in North America.....	3-13
3.7	North America PTA Supply, Demand and Trade .....	3-16
3.8	United States PTA Supply, Demand and Trade.....	3-17
3.9	South America PTA Consumption by Derivative.....	3-18
3.10	South America PTA Consumption by Country .....	3-18
3.11	PTA Capacity in South America .....	3-19
3.12	South America PTA Supply, Demand and Trade.....	3-20
3.13	Western Europe PTA Consumption by Derivative .....	3-22
3.14	PTA Capacity in Western Europe.....	3-23
3.15	Western Europe PTA Supply, Demand and Trade .....	3-26
3.16	Central Europe PTA Consumption by Derivative .....	3-27
3.17	PTA Capacity in Central Europe .....	3-27
3.18	Central Europe PTA Supply, Demand and Trade .....	3-29
3.19	Russian PTA Consumption .....	3-30
3.20	Other Eastern Europe PTA Consumption .....	3-30
3.21	PTA Capacity in Russia.....	3-31
3.22	Russia PTA Supply, Demand and Trade .....	3-33
3.23	Other Eastern Europe PTA Supply, Demand and Trade .....	3-34
3.24	Total Eastern Europe PTA Supply, Demand and Trade .....	3-35
3.25	Middle East PTA Consumption by Derivative .....	3-36
3.26	Middle East PTA Consumption by Country .....	3-37
3.27	PTA Capacity in the Middle East.....	3-38
3.28	Middle East PTA Supply, Demand and Trade .....	3-40
3.29	African PTA Consumption by Derivative .....	3-41
3.30	African PTA Consumption by Country .....	3-41
3.31	Africa PTA Supply, Demand and Trade .....	3-42
3.32	Asia Pacific PTA Consumption by Derivative.....	3-46
3.33	Asia Pacific PTA Consumption by Country .....	3-46
3.34	PTA Capacity in Asia Pacific .....	3-50
3.35	Asia Pacific PTA Supply, Demand and Trade.....	3-57

3.36	China PTA Supply, Demand and Trade .....	3-58
4.1	Global DMT Consumption by Derivative .....	4-2
4.2	Global DMT Consumption by Region.....	4-3
4.3	Global DMT Capacity .....	4-6
4.4	Global DMT Supply and Demand.....	4-8
5.1	Global Ethylene Oxide Consumption by Derivative .....	5-2
5.2	Global Ethylene Oxide Consumption by Region .....	5-3
5.3	Global EO Production by Process.....	5-5
5.4	Global EO Supply and Demand .....	5-6
5.5	North America Ethylene Oxide Consumption by Derivative.....	5-9
5.6	North America Ethylene Oxide Consumption by Country .....	5-10
5.7	Ethylene Oxide Capacity in North America .....	5-11
5.8	North America EO Supply, Demand and Trade .....	5-13
5.9	United States Ethylene Oxide Supply, Demand and Trade .....	5-14
5.10	South America Ethylene Oxide Consumption by Derivative .....	5-16
5.11	South America Ethylene Oxide Consumption by Country .....	5-16
5.12	Ethylene Oxide Capacity in South America .....	5-17
5.13	South America EO Supply, Demand and Trade .....	5-19
5.14	Western Europe EO Consumption by Derivative .....	5-21
5.15	Ethylene Oxide Capacity in Western Europe .....	5-23
5.16	Western Europe Ethylene Oxide Supply, Demand and Trade.....	5-26
5.17	Central Europe Ethylene Oxide Consumption by Derivative .....	5-27
5.18	Ethylene Oxide Capacity in Central Europe .....	5-28
5.19	Central Europe EO Supply, Demand and Trade.....	5-29
5.20	Russia Ethylene Oxide Consumption by Derivative .....	5-31
5.21	Ethylene Oxide Capacity in Russia .....	5-31
5.22	Russia EO Supply, Demand and Trade .....	5-33
5.23	Total Eastern Europe EO Supply, Demand and Trade .....	5-34
5.24	Middle East Ethylene Oxide Consumption by Derivative .....	5-36
5.25	Middle East Ethylene Oxide Consumption by Country .....	5-36
5.26	Ethylene Oxide Capacity in the Middle East .....	5-38
5.27	Middle East Ethylene Oxide Supply, Demand and Trade .....	5-40
5.28	Africa Ethylene Oxide Consumption by Derivative.....	5-41
5.29	Africa Ethylene Oxide Supply, Demand and Trade.....	5-42
5.30	Asia Pacific Ethylene Oxide Consumption by Derivative .....	5-46
5.31	Asia Pacific Ethylene Oxide Consumption by Country.....	5-47

5.32	Ethylene Oxide Capacity in Asia Pacific .....	5-50
5.33	Asia Pacific Ethylene Oxide Supply, Demand and Trade .....	5-55
5.34	China Ethylene Oxide Supply, Demand and Trade .....	5-56
6.1	Global MEG Consumption by Derivative.....	6-2
6.2	Global MEG Consumption by Region .....	6-3
6.3	Global MEG Production by Process.....	6-5
6.4	Global MEG Supply, Demand and Trade.....	6-7
6.5	North America MEG Consumption by Derivative .....	6-10
6.6	North America MEG Consumption by Country .....	6-10
6.7	MEG Capacity in North America .....	6-12
6.8	North America MEG Supply, Demand and Trade .....	6-15
6.9	United States MEG Supply, Demand and Trade .....	6-16
6.10	South America MEG Consumption by Derivative .....	6-18
6.11	South America MEG Consumption by Country .....	6-18
6.12	MEG Capacity in South America .....	6-19
6.13	South America MEG Supply, Demand and Trade .....	6-22
6.14	Western Europe MEG Consumption by Derivative .....	6-24
6.15	MEG Capacity in Western Europe .....	6-25
6.16	Western Europe MEG Supply, Demand and Trade .....	6-27
6.17	Central Europe MEG Consumption by Derivative .....	6-28
6.18	MEG Capacity in Central Europe .....	6-29
6.19	Central Europe MEG Supply, Demand and Trade .....	6-30
6.20	Russia MEG Consumption by Derivative .....	6-32
6.21	Other Eastern Europe MEG Consumption by End-Use.....	6-32
6.22	MEG Capacity in Russia .....	6-33
6.23	Russia MEG Supply, Demand and Trade .....	6-34
6.24	Other Eastern European MEG Supply, Demand and Trade .....	6-35
6.25	Total Eastern European MEG Supply, Demand and Trade .....	6-36
6.26	Middle East MEG Consumption by Derivative .....	6-38
6.27	Middle East MEG Consumption by Country.....	6-38
6.28	MEG Capacity in the Middle East.....	6-40
6.29	Middle East MEG Supply, Demand and Trade .....	6-43
6.30	Africa MEG Consumption by Derivative .....	6-44
6.31	Africa MEG Consumption by Country .....	6-45
6.32	Africa MEG Supply, Demand and Trade .....	6-46
6.33	Asia Pacific MEG Consumption by Derivative .....	6-49

6.34	Asia Pacific MEG Consumption by Country .....	6-49
6.35	MEG Capacity in Asia Pacific .....	6-54
6.36	Asia Pacific MEG Supply, Demand and Trade .....	6-60
6.37	China MEG Supply, Demand and Trade .....	6-61
7.1	Global PET Melt Phase Consumption by End-Use .....	7-3
7.2	Global PET Melt Phase Consumption by Region .....	7-4
7.3	Global PET Production by Process .....	7-6
7.4	Global PET Melt Phase Supply, Demand and Trade .....	7-9
7.5	North America PET Melt Phase Consumption by End-Use .....	7-13
7.6	North America PET Melt Phase Consumption by Country .....	7-13
7.7	PET Melt Phase Capacity in North America .....	7-15
7.8	North America PET Melt Phase Supply, Demand and Trade .....	7-17
7.9	United States PET Melt Phase Supply, Demand and Trade .....	7-18
7.10	South America PET Melt Phase Consumption by End-Use .....	7-20
7.11	South America PET Melt Phase Consumption by Country .....	7-20
7.12	PET Melt Phase Capacity in South America .....	7-22
7.13	South America PET Melt Phase Supply, Demand and Trade .....	7-24
7.14	Western Europe PET Melt Phase Consumption by End-Use .....	7-26
7.15	PET Melt Phase Capacity in Western Europe .....	7-28
7.16	Western Europe PET Melt Phase Supply, Demand and Trade .....	7-32
7.17	Central Europe PET Melt Phase Consumption by End-Use .....	7-33
7.18	<b>PET Melt Phase Capacity in Central Europe .....</b>	7-34
7.19	Central Europe PET Melt Phase Supply, Demand and Trade .....	7-35
7.20	Russia PET Melt Phase Consumption by End-Use .....	7-37
7.21	Other Eastern Europe PET Melt Phase Consumption by End-Use .....	7-38
7.22	PET Melt Phase Capacity in Russia .....	7-38
7.23	PET Melt Phase Capacity in Other Eastern Europe .....	7-40
7.24	Russia PET Melt Phase Supply, Demand and Trade .....	7-41
7.25	Other Eastern Europe PET Melt Phase Supply, Demand and Trade .....	7-42
7.26	Total Eastern Europe PET Melt Phase Supply, Demand and Trade .....	7-43
7.27	Middle East PET Melt Phase Consumption by End-Use .....	7-45
7.28	Middle East PET Melt Phase Consumption by Country .....	7-45
7.29	PET Melt Phase Capacity in Middle East .....	7-47
7.30	Middle East PET Melt Phase Supply, Demand and Trade .....	7-49
7.31	Africa PET Melt Phase Consumption by End-Use .....	7-51
7.32	Africa PET Melt Phase Consumption by Country .....	7-51

7.33 PET Melt Phase Capacity in Africa .....	7-52
7.34 Africa PET Melt Phase Supply, Demand and Trade .....	7-54
7.35 Asia Pacific PET Melt Phase Consumption by End-Use .....	7-59
7.36 Asia Pacific PET Melt Phase Consumption by Country.....	7-59
7.37 PET Melt Phase Capacity in Asia Pacific.....	7-64
7.38 Asia Pacific PET Melt Phase Supply, Demand and Trade .....	7-75
7.39 China PET Melt Phase Supply, Demand and Trade.....	7-76
8.1 Global PET Bottle Grade Consumption by Region .....	8-4
8.2 Global PET Bottle Grade Supply, Demand and Trade .....	8-9
8.3 North America PET Bottle Grade Consumption by End-Use.....	8-12
8.4 North America PET Bottle Grade Consumption by Country .....	8-12
8.5 PET Bottle Grade Capacity in North America .....	8-14
8.6 North America PET Bottle Grade Supply, Demand and Trade.....	8-16
8.7 United States PET Bottle Grade Supply, Demand and Trade .....	8-17
8.8 South America PET Bottle Grade Consumption by End-Use .....	8-18
8.9 South America PET Bottle Grade Consumption by Country.....	8-19
8.10 PET Bottle Grade Capacity in South America.....	8-19
8.11 South America PET Bottle Grade Supply, Demand and Trade .....	8-22
8.12 Western Europe PET Bottle Grade Consumption by End-Use.....	8-24
8.13 PET Bottle Grade Capacity in Western Europe .....	8-25
8.14 Western Europe PET Bottle Grade Supply, Demand and Trade .....	8-28
8.15 Central Europe PET Bottle Grade Consumption.....	8-29
8.16 PET Bottle Grade Capacity in Central Europe .....	8-30
8.17 Central Europe PET Bottle Grade Supply, Demand and Trade.....	8-31
8.18 Russian PET Bottle Grade Consumption .....	8-33
8.19 Other Eastern Europe PET Bottle Grade Consumption.....	8-33
8.20 PET Bottle Grade Capacity in Russia .....	8-34
8.21 PET Bottle Grade Capacity in Other Eastern Europe .....	8-35
8.22 Russia PET Bottle Grade Supply, Demand and Trade .....	8-37
8.23 Other Eastern European PET Bottle Grade Supply, Demand and Trade.....	8-38
8.24 Total Eastern European PET Bottle Grade Supply, Demand and Trade.....	8-39
8.25 Middle East PET Bottle Grade Consumption .....	8-41
8.26 Middle East PET Bottle Grade Consumption by Country .....	8-41
8.27 PET Bottle Grade Capacity in the Middle East .....	8-42
8.28 Middle East PET Bottle Grade Supply, Demand and Trade .....	8-44
8.29 Africa PET Bottle Grade Consumption.....	8-45

---

8.30	Africa PET Bottle Grade Consumption by Country .....	8-45
8.31	PET Bottle Grade Capacity in Africa .....	8-46
8.32	Africa PET Bottle Grade Supply, Demand and Trade.....	8-48
8.33	Asia Pacific PET Bottle Grade Consumption .....	8-51
8.34	Asia Pacific PET Bottle Grade Consumption by Country.....	8-51
8.35	PET Bottle Grade Capacity in Asia Pacific.....	8-55
8.36	Asia Pacific PET Bottle Grade Supply, Demand and Trade .....	8-61
8.37	China PET Bottle Grade Supply, Demand and Trade.....	8-62