

**APEC**  
**ENERGY BALANCE TABLES**

<b>2002</b>									Mtoe
	Coal	Oil	Gas	Hydro	Nuclear	NRE	Electricity	Heat	Total
Production	1 643.9	1 399.2	1 382.5	113.4	382.0	460.1			5 381.2
Net Imports	- 77.6	773.2	- 112.6				- 6.5		576.5
<b>TPED</b>	<b>1 570.1</b>	<b>2 164.6</b>	<b>1 254.7</b>	<b>113.4</b>	<b>382.0</b>	<b>460.1</b>	<b>- 6.5</b>		<b>5 938.6</b>
Electricity and Heat Generation	-1 167.7	- 143.0	- 506.5	- 113.4	- 382.0	- 78.3	737.4	179.9	- 1 473.7
Petroleum Refineries		- 335.6	- 28.7			- 1.3	- 10.7	- 14.0	- 390.2
Others	- 68.6	- 21.7	- 151.6			- 6.7	- 19.5	- 6.8	- 274.9
<b>TFED</b>	<b>336.7</b>	<b>1 680.0</b>	<b>565.6</b>			<b>373.9</b>	<b>693.3</b>	<b>169.1</b>	<b>3 818.6</b>
Industry	271.2	418.1	272.0			56.4	306.6	83.0	1 407.1
Transport	5.4	1 076.5	0.7			1.8	7.2		1 091.7
Residential	51.7	99.6	198.1			314.1	200.2	74.7	938.3
Commercial	8.4	85.8	94.9			1.6	179.4	11.4	381.5

  

<b>2010</b>									Mtoe
	Coal	Oil	Gas	Hydro	Nuclear	NRE	Electricity	Heat	Total
Production	2 374.0	1 566.5	1 535.1	131.6	442.2	489.7			6 539.0
Net Imports	- 163.5	956.7	- 66.5				- 0.3		726.5
<b>TPED</b>	<b>2 210.6</b>	<b>2 523.2</b>	<b>1 468.6</b>	<b>131.6</b>	<b>442.2</b>	<b>489.7</b>	<b>- 0.3</b>		<b>7 265.5</b>
Electricity and Heat Generation	-1 687.6	- 110.8	- 587.9	- 131.6	- 442.2	- 118.0	971.9	206.9	- 1 899.2
Petroleum Refineries		- 349.4	- 30.3			- 1.3	- 12.0	- 17.4	- 410.4
Others	- 56.1	- 22.9	- 175.9			- 8.9	- 23.6	- 7.2	- 294.6
<b>TFED</b>	<b>466.8</b>	<b>2 040.2</b>	<b>674.5</b>			<b>361.5</b>	<b>935.9</b>	<b>182.3</b>	<b>4 661.2</b>
Industry	403.3	511.0	327.7			63.8	438.2	97.8	1 841.8
Transport	3.8	1 323.7	1.7			2.6	9.8		1 341.5
Residential	50.8	117.6	222.0			293.4	249.4	74.3	1 007.6
Commercial	8.9	87.9	123.1			1.7	238.6	10.2	470.4

  

<b>2020</b>									Mtoe
	Coal	Oil	Gas	Hydro	Nuclear	NRE	Electricity	Heat	Total
Production	2 812.1	1 667.2	1 709.1	159.0	540.3	526.9			7 414.6
Net Imports	- 96.7	1 314.5	73.8				- 0.5		1 291.2
<b>TPED</b>	<b>2 715.5</b>	<b>2 981.7</b>	<b>1 782.9</b>	<b>159.0</b>	<b>540.3</b>	<b>526.9</b>	<b>- 0.5</b>		<b>8 705.8</b>
Electricity and Heat Generation	-2 138.1	- 102.6	- 741.3	- 159.0	- 540.3	- 166.5	1 292.6	234.8	- 2 320.4
Petroleum Refineries		- 363.7	- 31.0			- 1.3	- 12.6	- 19.6	- 428.2
Others	- 62.3	- 23.2	- 177.9			- 12.7	- 25.3	- 7.3	- 308.6
<b>TFED</b>	<b>515.1</b>	<b>2 491.8</b>	<b>832.7</b>			<b>346.4</b>	<b>1 254.2</b>	<b>207.9</b>	<b>5 648.1</b>
Industry	457.4	630.1	408.9			75.8	600.0	116.5	2 288.6
Transport	2.4	1 628.8	2.7			3.9	12.8		1 650.7
Residential	46.6	138.7	253.8			264.9	314.9	81.6	1 100.6
Commercial	8.7	94.1	167.3			1.8	326.4	9.8	608.1

  

<b>2030</b>									Mtoe
	Coal	Oil	Gas	Hydro	Nuclear	NRE	Electricity	Heat	Total
Production	3 363.5	1 682.6	1 765.6	196.6	642.8	588.0			8 239.0
Net Imports	2.8	1 804.9	284.3				1.2		2 093.2
<b>TPED</b>	<b>3 366.3</b>	<b>3 487.5</b>	<b>2 049.8</b>	<b>196.6</b>	<b>642.8</b>	<b>588.0</b>	<b>1.2</b>		<b>10 332.2</b>
Electricity and Heat Generation	-2 738.3	- 101.3	- 837.6	- 196.6	- 642.8	- 228.8	1 678.5	263.3	- 2 803.6
Petroleum Refineries		- 390.6	- 32.4			- 1.3	- 13.1	- 21.3	- 458.7
Others	- 67.9	- 22.9	- 169.0			- 17.5	- 26.3	- 7.2	- 310.6
<b>TFED</b>	<b>560.2</b>	<b>2 972.8</b>	<b>1 010.8</b>			<b>340.4</b>	<b>1 640.3</b>	<b>234.8</b>	<b>6 759.2</b>
Industry	509.3	738.9	494.9			90.0	796.9	138.6	2 768.6
Transport	0.1	1 973.4	4.1			5.5	16.3		1 999.4
Residential	42.4	161.8	299.7			242.9	389.1	85.3	1 221.2
Commercial	8.4	98.6	212.1			2.0	438.0	10.9	770.1

## APEC

## MACRO ASSUMPTIONS

	1980	2002	2010	2020	2030	Growth Rate (% per annum)				
						80-02	02-10	10-20	20-30	02-30
<b>GDP</b> (2000 PPP US\$ billion)	10 398	26 682	38 019	56 422	81 654	4.4	4.5	4.0	3.8	4.1
<b>Population</b> (million)	1 842	2 590	2 736	2 894	3 003	1.6	0.7	0.6	0.4	0.5
<b>GDP per capita</b> (2000 PPP US\$)	5 646	10 301	13 893	19 498	27 195	2.8	3.8	3.4	3.4	3.5
<b>GDP in Services</b> (2000 PPP US\$ billion)	6 946	16 474	22 923	33 505	47 745	4.0	4.2	3.9	3.6	3.9
<b>GDP in Industry</b> (2000 PPP US\$ billion)	2 893	7 870	12 065	18 327	26 926	4.7	5.5	4.3	3.9	4.5
<b>Urbanisation level</b> (%)	41	51	56	64	68	1.3	1.3	0.7	1.1	

## ENERGY PROJECTIONS

	Mtoe					Growth rate (% per annum)				
	1980	2002	2010	2020	2030	80-02	02-10	10-20	20-30	02-30
<b>Production</b>	<b>2 897.7</b>	<b>5 381.2</b>	<b>6 539.0</b>	<b>7 414.6</b>	<b>8 239.0</b>	<b>2.9</b>	<b>2.5</b>	<b>1.3</b>	<b>1.1</b>	<b>1.5</b>
Coal	859.8 (30%)	1 643.9 (31%)	2 374.0 (36%)	2 812.1 (38%)	3 363.5 (41%)	3.0	4.7	1.7	1.8	2.6
Oil	946.5 (33%)	1 399.2 (26%)	1 566.5 (24%)	1 667.2 (22%)	1 682.6 (20%)	1.8	1.4	0.6	0.1	0.7
Gas	590.6 (20%)	1 382.5 (26%)	1 535.1 (23%)	1 709.1 (23%)	1 765.6 (21%)	3.9	1.3	1.1	0.3	0.9
Hydro	65.0 (2%)	113.4 (2%)	131.6 (2%)	159.0 (2%)	196.6 (2%)	2.6	1.9	1.9	2.1	2.0
NRE	331.6 (11%)	460.1 (9%)	489.7 (7%)	526.9 (7%)	588.0 (7%)	1.5	0.8	0.7	1.1	0.9
Nuclear	104.3 (4%)	382.0 (7%)	442.2 (7%)	540.3 (7%)	642.8 (8%)	6.1	1.8	2.0	1.8	1.9
<b>Net Imports</b>	<b>535.9</b>	<b>576.5</b>	<b>726.5</b>	<b>1 291.2</b>	<b>2 093.2</b>	<b>0.3</b>	<b>2.9</b>	<b>5.9</b>	<b>5.0</b>	<b>4.7</b>
Coal	- 33.0	- 77.6	- 163.5	- 96.7	2.8	4.0	9.8	- 5.1		
Oil	564.9	773.2	956.7	1 314.5	1 804.9	1.4	2.7	3.2	3.2	3.1
Gas	3.9	- 112.6	- 66.5	73.8	284.3		- 6.4		14.4	
Electricity		- 6.5	- 0.3	- 0.5	1.2		-33.3	6.1		
<b>Total Primary Energy Demand</b>	<b>3 363.2</b>	<b>5 938.6</b>	<b>7 265.5</b>	<b>8 705.8</b>	<b>10 332.2</b>	<b>2.6</b>	<b>2.6</b>	<b>1.8</b>	<b>1.7</b>	<b>2.0</b>
Coal	822.3 (24%)	1 570.1 (26%)	2 210.6 (30%)	2 715.5 (31%)	3 366.3 (33%)	3.0	4.4	2.1	2.2	2.8
Oil	1 444.6 (43%)	2 164.6 (36%)	2 523.2 (35%)	2 981.7 (34%)	3 487.5 (34%)	1.9	1.9	1.7	1.6	1.7
Gas	595.3 (18%)	1 254.7 (21%)	1 468.6 (20%)	1 782.9 (20%)	2 049.8 (20%)	3.4	2.0	2.0	1.4	1.8
Hydro	65.0 (2%)	113.7 (2%)	131.9 (2%)	159.2 (2%)	196.9 (2%)	2.6	1.9	1.9	2.1	2.0
NRE	331.6 (10%)	460.1 (8%)	489.7 (7%)	526.9 (6%)	588.0 (6%)	1.5	0.8	0.7	1.1	0.9
Nuclear	104.3 (3%)	382.0 (6%)	442.2 (6%)	540.3 (6%)	642.8 (6%)	6.1	1.8	2.0	1.8	1.9
<b>Input for Electricity and Heat Generation</b>	<b>- 871.0</b>	<b>- 2 391.0</b>	<b>- 3 078.0</b>	<b>- 3 847.8</b>	<b>- 4 745.4</b>	<b>4.7</b>	<b>3.2</b>	<b>2.3</b>	<b>2.1</b>	<b>2.5</b>
Coal	- 399.8 (46%)	- 1 167.7 (49%)	- 1 687.6 (55%)	- 2 138.1 (56%)	- 2 738.3 (58%)	5.0	4.7	2.4	2.5	3.1
Oil	- 184.3 (21%)	- 143.0 (6%)	- 110.8 (4%)	- 102.6 (3%)	- 101.3 (2%)	- 1.1	- 3.1	- 0.8	- 0.1	- 1.2
Gas	- 108.1 (12%)	- 506.5 (21%)	- 587.9 (19%)	- 741.3 (19%)	- 837.6 (18%)	7.3	1.9	2.3	1.2	1.8
Hydro	- 65.0 (7%)	- 113.4 (5%)	- 131.6 (4%)	- 159.0 (4%)	- 196.6 (4%)	2.6	1.9	1.9	2.1	2.0
NRE	- 9.6 (1%)	- 78.3 (3%)	- 118.0 (4%)	- 166.5 (4%)	- 228.8 (5%)	10.0	5.3	3.5	3.2	3.9
Nuclear	- 104.3 (12%)	- 382.0 (16%)	- 442.2 (14%)	- 540.3 (14%)	- 642.8 (14%)	6.1	1.8	2.0	1.8	1.9
<b>Other Transformation</b>	<b>- 176.8</b>	<b>- 665.1</b>	<b>- 705.0</b>	<b>- 736.9</b>	<b>- 769.3</b>	<b>6.2</b>	<b>0.7</b>	<b>0.4</b>	<b>0.4</b>	<b>0.5</b>
Coal	- 9.7 (5%)	- 68.6 (10%)	- 56.1 (8%)	- 62.3 (8%)	- 67.9 (9%)	9.3	- 2.5	1.1	0.9	
Oil	- 100.8 (57%)	- 357.3 (54%)	- 372.2 (53%)	- 386.9 (53%)	- 413.4 (54%)	5.9	0.5	0.4	0.7	0.5
Gas	- 57.4 (32%)	- 180.3 (27%)	- 206.2 (29%)	- 208.9 (28%)	- 201.4 (26%)	5.3	1.7	0.1	- 0.4	0.4
NRE		- 8.0 (1%)	- 10.2 (1%)	- 14.0 (2%)	- 18.8 (2%)		3.1	3.2	3.0	3.1
Electricity	- 8.8 (5%)	- 30.2 (5%)	- 35.6 (5%)	- 37.9 (5%)	- 39.4 (5%)	5.8	2.1	0.6	0.4	0.9
Heat	- 0.1 (0%)	- 20.8 (3%)	- 24.6 (3%)	- 26.9 (4%)	- 28.5 (4%)		2.1	0.9	0.6	1.1

## APEC

	Mtoe					Growth rate (% per annum)				
	1980	2002	2010	2020	2030	80-02	02-10	10-20	20-30	02-30
<b>Total Final Energy Demand</b>	<b>2 336.2</b>	<b>3 818.6</b>	<b>4 661.2</b>	<b>5 648.1</b>	<b>6 759.2</b>	<b>2.3</b>	<b>2.5</b>	<b>1.9</b>	<b>1.8</b>	<b>2.1</b>
Coal	310.5 (13%)	336.7 (9%)	466.8 (10%)	515.1 (9%)	560.2 (8%)	0.4	4.2	1.0	0.8	1.8
Oil	1 039.8 (45%)	1 680.0 (44%)	2 040.2 (44%)	2 491.8 (44%)	2 972.8 (44%)	2.2	2.5	2.0	1.8	2.1
Gas	396.3 (17%)	565.6 (15%)	674.5 (14%)	832.7 (15%)	1 010.8 (15%)	1.6	2.2	2.1	2.0	2.1
NRE	290.8 (12%)	373.9 (10%)	361.5 (8%)	346.4 (6%)	340.4 (5%)	1.1	-0.4	-0.4	-0.2	-0.3
Electricity	290.4 (12%)	693.3 (18%)	935.9 (20%)	1 254.2 (22%)	1 640.3 (24%)	4.0	3.8	3.0	2.7	3.1
Heat	8.5 (0%)	169.1 (4%)	182.3 (4%)	207.9 (4%)	234.8 (3%)	14.6	0.9	1.3	1.2	1.2
<b>Industry</b>	<b>932.7</b>	<b>1 407.1</b>	<b>1 841.8</b>	<b>2 288.6</b>	<b>2 768.6</b>	<b>1.9</b>	<b>3.4</b>	<b>2.2</b>	<b>1.9</b>	<b>2.4</b>
Coal	228.6 (25%)	271.2 (19%)	403.3 (22%)	457.4 (20%)	509.3 (18%)	0.8	5.1	1.3	1.1	2.3
Oil	313.0 (34%)	418.1 (30%)	511.0 (28%)	630.1 (28%)	738.9 (27%)	1.3	2.5	2.1	1.6	2.1
Gas	199.4 (21%)	272.0 (19%)	327.7 (18%)	408.9 (18%)	494.9 (18%)	1.4	2.4	2.2	1.9	2.2
NRE	46.4 (5%)	56.4 (4%)	63.8 (3%)	75.8 (3%)	90.0 (3%)	0.9	1.6	1.7	1.7	1.7
Electricity	138.5 (15%)	306.6 (22%)	438.2 (24%)	600.0 (26%)	796.9 (29%)	3.7	4.6	3.2	2.9	3.5
Heat	6.8 (1%)	83.0 (6%)	97.8 (5%)	116.5 (5%)	138.6 (5%)	12.0	2.1	1.8	1.8	1.9
<b>Transport</b>	<b>602.8</b>	<b>1 091.7</b>	<b>1 341.5</b>	<b>1 650.7</b>	<b>1 999.4</b>	<b>2.7</b>	<b>2.6</b>	<b>2.1</b>	<b>1.9</b>	<b>2.2</b>
Coal	9.6 (2%)	5.4 (0%)	3.8 (0%)	2.4 (0%)	0.1 (0%)	-2.6	-4.3	-4.4	-28.5	-13.8
Oil	591.2 (98%)	1 076.5 (99%)	1 323.7 (99%)	1 628.8 (99%)	1 973.4 (99%)	2.8	2.6	2.1	1.9	2.2
Gas		0.7 (0%)	1.7 (0%)	2.7 (0%)	4.1 (0%)		12.1	5.0	4.2	6.7
NRE		1.8 (0%)	2.6 (0%)	3.9 (0%)	5.5 (0%)		4.5	4.0	3.5	4.0
Electricity	2.0 (0%)	7.2 (1%)	9.8 (1%)	12.8 (1%)	16.3 (1%)	6.0	3.9	2.8	2.4	3.0
<b>Residential</b>	<b>603.0</b>	<b>938.3</b>	<b>1 007.5</b>	<b>1 100.6</b>	<b>1 221.2</b>	<b>2.0</b>	<b>0.9</b>	<b>0.9</b>	<b>1.0</b>	<b>0.9</b>
Coal	67.8 (11%)	51.7 (6%)	50.8 (5%)	46.6 (4%)	42.4 (3%)	-1.2	-0.2	-0.9	-0.9	-0.7
Oil	76.2 (13%)	99.6 (11%)	117.6 (12%)	138.7 (13%)	161.8 (13%)	1.2	2.1	1.7	1.5	1.7
Gas	127.2 (21%)	198.1 (21%)	222.0 (22%)	253.8 (23%)	299.7 (25%)	2.0	1.4	1.3	1.7	1.5
NRE	244.4 (41%)	314.1 (33%)	293.4 (29%)	264.9 (24%)	242.9 (20%)	1.1	-0.8	-1.0	-0.9	-0.9
Electricity	86.4 (14%)	200.2 (21%)	249.4 (25%)	314.9 (29%)	389.1 (32%)	3.9	2.8	2.4	2.1	2.4
Heat	1.1 (0%)	74.7 (8%)	74.3 (7%)	81.6 (7%)	85.3 (7%)		-0.1	0.9	0.4	0.5
<b>Commercial</b>	<b>197.6</b>	<b>381.5</b>	<b>470.4</b>	<b>608.1</b>	<b>770.1</b>	<b>3.0</b>	<b>2.7</b>	<b>2.6</b>	<b>2.4</b>	<b>2.5</b>
Coal	4.5 (2%)	8.4 (2%)	8.9 (2%)	8.7 (1%)	8.4 (1%)	2.9	0.7	-0.2	-0.4	
Oil	59.4 (30%)	85.8 (22%)	87.9 (19%)	94.1 (15%)	98.6 (13%)	1.7	0.3	0.7	0.5	0.5
Gas	69.8 (35%)	94.9 (25%)	123.1 (26%)	167.3 (28%)	212.1 (28%)	1.4	3.3	3.1	2.4	2.9
NRE		1.6 (0%)	1.7 (0%)	1.8 (0%)	2.0 (0%)	21.4	0.6	0.8	1.0	0.8
Electricity	63.5 (32%)	179.4 (47%)	238.6 (51%)	326.4 (54%)	438.0 (57%)	4.8	3.6	3.2	3.0	3.2
Heat	0.5 (0%)	11.4 (3%)	10.2 (2%)	9.8 (2%)	10.9 (1%)	14.9	-1.4	-0.4	1.1	-0.2

Note: Net imports include intraregional trade

## ENERGY SECURITY

	1980	2002	2010	2020	2030
Diversity of Primary Energy Demand (Rated between 1 and 100)	83	89	88	87	87
Net Energy Import Ratio (%)	16	10	10	15	20
Net Oil Import Dependency (%)	39	36	38	44	52

**APEC  
ELECTRICITY GENERATION**

	1980	2002	2010	2020	2030	Growth rate (% per annum)				
						80-02	02-10	10-20	20-30	02-30
<b>Total Electricity Generation (TWh)</b>	<b>4 034</b>	<b>9 279</b>	<b>12 128</b>	<b>15 886</b>	<b>20 518</b>	<b>3.9</b>	<b>3.4</b>	<b>2.7</b>	<b>2.6</b>	<b>2.9</b>
Coal	1 605 (40%)	4 055 (44%)	5 919 (49%)	7 975 (50%)	10 940 (53%)	4.3	4.8	3.0	3.2	3.6
Oil	781 (19%)	506 (5%)	362 (3%)	317 (2%)	299 (1%)	-2.0	-4.1	-1.3	-0.6	-1.9
Gas	481 (12%)	1 774 (19%)	2 234 (18%)	3 087 (19%)	3 733 (18%)	6.1	2.9	3.3	1.9	2.7
Hydro	755 (19%)	1 309 (14%)	1 530 (13%)	1 845 (12%)	2 278 (11%)	2.5	2.0	1.9	2.1	2.0
NRE	13	147 (2%)	357 (3%)	541 (3%)	741 (4%)	11.6	11.8	4.3	3.2	6.0
Nuclear	398 (10%)	1 488 (16%)	1 725 (14%)	2 121 (13%)	2 526 (12%)	6.2	1.9	2.1	1.8	1.9
<b>Total Installed Generation Capacity (GW)</b>	<b>960</b>	<b>2 139</b>	<b>2 825</b>	<b>3 458</b>	<b>4 208</b>	<b>3.7</b>	<b>3.5</b>	<b>2.0</b>	<b>2.0</b>	<b>2.4</b>
Thermal	677 (70%)	1 527 (71%)	2 049 (73%)	2 499 (72%)	3 062 (73%)	3.8	3.7	2.0	2.1	2.5
Coal		752 (35%)	1 061 (38%)	1 364 (39%)	1 711 (41%)		4.4	2.5	2.3	3.0
Oil		393 (18%)	424 (15%)	380 (11%)	388 (9%)		1.0	-1.1	0.2	-0.05
Gas		382 (18%)	563 (20%)	755 (22%)	963 (23%)		5.0	3.0	2.5	3.4
Hydro	205 (21%)	377 (18%)	466 (17%)	558 (16%)	647 (15%)	2.8	2.7	1.8	1.5	1.9
NRE	3	31 (1%)	77 (3%)	124 (4%)	170 (4%)	11.7	11.8	4.9	3.2	6.2
Nuclear	75 (8%)	204 (10%)	233 (8%)	278 (8%)	329 (8%)	4.6	1.7	1.8	1.7	1.7

**ENERGY INTENSITY & CO<sub>2</sub> EMISSIONS**

	1980	2002	2010	2020	2030	Growth Rates (% per annum)				
						80-02	02-10	10-20	20-30	02-30
<b>Energy Intensity (toe per US\$ million GDP)</b>	<b>323</b>	<b>223</b>	<b>191</b>	<b>155</b>	<b>127</b>	<b>-1.7</b>	<b>-1.9</b>	<b>-2.1</b>	<b>-1.9</b>	<b>-2.0</b>
Industry (toe per US\$ million GDP in Industry)	322	179	153	125	103	-2.6	-2.0	-2.0	-1.9	-2.0
Commercial (toe per US\$ million GDP in Services)	28	23	21	18	16	-0.9	-1.5	-1.2	-1.2	-1.3
<b>Energy Intensity (kgoe per capita)</b>	<b>1 826</b>	<b>2 293</b>	<b>2 655</b>	<b>3 009</b>	<b>3 441</b>	<b>1.0</b>	<b>1.9</b>	<b>1.3</b>	<b>1.4</b>	<b>1.5</b>
Industry	507	543	673	791	922	0.3	2.7	1.6	1.5	1.9
Transport	327	421	490	570	666	1.2	1.9	1.5	1.6	1.6
Residential	327	362	368	380	407	0.5	0.2	0.3	0.7	0.4
Commercial	107	147	172	210	256	1.4	2.0	2.0	2.0	2.0
<b>CO<sub>2</sub> Emissions (million tonnes)</b>	<b>7 934</b>	<b>14 740</b>	<b>18 715</b>	<b>22 741</b>	<b>27 364</b>	<b>1.0</b>	<b>1.9</b>	<b>1.3</b>	<b>1.4</b>	<b>1.5</b>
Electricity Generation	2 305	6 123	8 217	10 287	12 837	4.5	3.7	2.3	2.2	2.7
Transformation other than Electricity Generation	473	1 043	1 106	1 170	1 232	3.7	0.7	0.6	0.5	0.6
Industry	2 239	2 892	3 799	4 541	5 255	1.2	3.5	1.8	1.5	2.2
Transport	1 769	3 199	3 929	4 836	5 856	2.7	2.6	2.1	1.9	2.2
Residential	786	968	1 075	1 197	1 357	1.0	1.3	1.1	1.3	1.2
Commercial	362	514	589	710	827	1.6	1.7	1.9	1.5	1.7
<b>CO<sub>2</sub> Emissions Intensity</b>										
CO <sub>2</sub> emissions per GDP (tonnes per US\$ million)	822	755	732	651	598	-0.4	-0.4	-1.2	-0.9	-0.8
CO <sub>2</sub> emissions per capita (tonnes per capita)	9.2	12.7	14.9	16.7	18.9	1.5	2.0	1.2	1.2	1.4

**ENERGY INVESTMENT REQUIREMENTS**

(Cumulative from 2003 - )	2010	2020	2030
<b>Total (2000 US\$ billion)</b>	<b>1 844 - 2 338</b>	<b>3 845 - 4 896</b>	<b>5 954 - 7 556</b>
Coal Production & Transportation	112 - 137	209 - 251	326 - 388
Oil & Gas Production & Processing	349 - 512	669 - 984	911 - 1 338
Oil & Gas International Trade	175 - 212	321 - 397	452 - 567
Oil & Gas Domestic Pipeline	142 - 203	333 - 476	488 - 698
Electricity Generation & Transmission	1 066 - 1 273	2 312 - 2 788	3 777 - 4 566