ANNEX V SUPPLEMENTARY TABLES **AND FIGURES**¹

Table 1.

Investment through commercial banks by different sectors in 2000 and 2005

	2000				2005		
Sectors	GFCF, 2000 USD million	Investment, 2000 USD million	Investment as a percentage of GFCF	Debt/equity	Investment USD million	Debt/equity	
Agriculture, hunting,							
forestry; fishing	155,322	N.A.	N.A.	N.A.	N.A.	N.A.	
Mining and quarrying	123,726	10,550	8.53	80/20	12,683	83/17	
Manufacturing	1,153,976	14,821	1.28	81/19	38,087	73/27	
Electricity,							
gas and water supply	228,236	66,174	28.99	83/17	58,345	85/15	
Wholesale retail trade,							
repair of motor vehicles,							
motorcycles, etc.; hotels							
and restaurants	551,284	N.A.	N.A.	N.A.	N.A.	N.A.	
Construction	388,732	N.A.	N.A.	N.A.	N.A.	N.A.	
Transport, storage							
and communications	788,368	112,064	14.21	82/18	47,894	84/16	
Financial intermediation;							
real estate, renting and							
business activities	2,316,125	1,034	0.04	75/25	195	100/0	
Public administration							
and defense; compulsory							
social security	552,059	3,776	0.68	88/12	5,138	92/8	
Education; health and social							
work; other community, social							
and personal services	617,391	1,208	0.20	94/6	3,533	91/9	
Total	6,875,219	209,628	3.05	82/18	165,875	85/15	

Data Sources: Dealogic (2007). Note: No data available for 2005 GFCF at the time of study. Abreviation: GFCF = Gross Fixed Capital Formation.

¹ All figures are expressed in 2005 United States dollars unless otherwise stated.

Table 2.

Investment through commercial banks by regions in 2000, percentage of GFCF

Region	Mining and quarrying	Manufacturing	Electricity, gas and water supply	Transport, storage and communications	Total including other sectors
	0.07	0.07	0.17	1.00	0.00
AIICa	0.97	U.Z/	U.17	1.39	Z.9Z
Developing Asia	0.03	0.65	0.80	2.33	3.99
Latin America	2.19	0.39	1.77	3.21	7.62
Middle East	0.00	2.29	1.70	1.57	5.55
OECD Europe	0.03	0.05	0.75	3.50	4.53
OECD North America	0.07	0.20	1.35	0.59	2.21
OECD Pacific	0.05	0.03	0.61	0.34	1.06
Other Europe Total	0.00	0.00	0.00	23.23	23.23
Transition economies	0.05	0.23	0.14	0.10	0.51
World total	0.15	0.22	0.96	1.63	3.05
Annex I Parties	0.05	0.09	0.92	1.54	2.69
Non-Annex I Parties	0.52	0.48	1.08	1.02	3.14
Least Developed Countries	1.93	0.00	0.18	0.19	2.31

Source: Dealogic (2007). Abbreviations: Annex I Parties = Parties included in Annex I to the Convention, Non-Annex I Parties = Parties not included in Annex I to the Convention, OECD = Organisation for Economic Co-operation and Development.

Table 3. Sources of investment by regions in 2000

Investments	Africa	Dev Asia	LA	Mid East	OECD Europe	
Total investment, USD billion	118	804	332	140	2,067	
	· · · · · · · · · · · · · · · · · · ·	· · · ·				
Households (percentage)						
Total investment	19.24	16.91	21.55	25.34	28.29	
Domestic	19.24	16.91	21.55	25.34	28.29	
Corporations' (percentage)	E / Q1	70.70	00.33	6400	50.02	
	45.50		12.67		10.50	
Doht	45.59	0.01		1.00	- 19.02	
	0.48	10.01	20.07	1.09 E E O	31.87	
	C./J	1700	27.08	0.08	40.87	
	0.41	17.90	30.81	4.84	52.01	
Domestic adjusted	40.18	36.20	-23.14	52.70	-03.81	
Government (percentage)						
Total investment	25.95	10.32	11.52	10.44	12.48	
Domestic	23.25	8.67	3.32	7.40	11.12	
Debt	0.38	0.31	7.48	2.81	1.33	
ODA bilateral	1.41	0.80	0.59	0.19	0.01	
ODA multilateral	0.91	0.54	0.14	0.05	0.01	
Total ODA	2.32	1.34	0.73	0.24	0.02	
Total (percentage)						
Total investment	100.0	100.0	100.0	100.0	100.0	
Domestic	88.07	79.72	38.55	90.28	19.90	
FDI	8.75	18.61	27.68	5.58	46.87	
Domestic adjusted	91.41	80.44	29.41	91.02	32.48	
FDI adjusted	5.41	17.90	36.81	4.84	34.29	
Debt	0.86	0.33	33.04	3.90	33.21	
ODA	2.32	1.34	0.73	0.24	0.02	

Data Source: UNSTAT, National Accounts Database; BIS, 2007; World Bank, 2006, World Development Indicator; OECD, CRS. Abbreviations: Dev Asia = Developing Asia, FDI = Foreign direct investment, LA = Latin America, Mid East = Middle East, OECD = Organization for Economic Co-operation and Development, OECD NA = OECD North America, TE = Transition Economies, AI Parties = Parties included in Annex I to the Convention, NAI Parties = Parties not included in Annex I to the Convention, LDC = Least Developed Countries.

^a Combined financial and non-financial corporations.

OECD NA	OECD Pacific	Other Europe	TE	World	AI Parties	NAI Parties	LDC
2,488	1,695	2	105	7,750	6,014	1,654	40
,	,			,		,	
33.34	20.51	19.43	15.90	26.38	28.52	18.69	17.92
33.34	20.51	19.43	15.90	26.38	28.52	18.69	17.92
54.44	60.86	6610	72.18	50.00	50.00	5745	60.11
13.84	58.4.4	6610	60.38	20.78	20.78	13.26	5728
02.07	012	0.10	0.00	16.81	16.81	20.20	0.02
1833	2.20	0.00	1210	22.40	22.40	20.20	11.81
2749	2.20	-12.75	12.10	22.40	22.40	23.55	13.96
-1365	55.20	78.86		_168		_10.30	13.30
-10.00	00.29	70.00	40.02	-1.00	-1.00	-10.09	40.02
12.22	18.62	14.47	10.93	13.62	14.04	12.20	21.14
12.50	18.63	14.39	-15.98	12.37	13.29	9.05	15.26
-0.28	-0.01	0.00	26.28	1.03	0.74	2.12	-0.39
0.00	0.00	0.08	0.48	0.14	0.00	0.65	3.17
0.00	0.00	0.00	0.15	0.08	0.00	0.38	3.09
0.01	0.00	0.08	0.63	0.23	0.00	1.03	6.26
· · · · · · · · · · · · · · · · · · ·	·	·		·		·	
				1	I		
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
59.68	97.58	99.92	60.29	59.54	55.07	85.02	82.05
18.33	2.29	0.00	12.19	22.40	23.99	11.81	12.00
50.52	96.74	112.67	57.42	59.48	55.41	82.87	79.45
27.49	3.14	-12.75	15.06	22.46	23.65	13.96	14.61
21.99	0.12	0.00	26.89	17.84	20.94	2.14	-0.32
0.01	0.00	0.08	0.63	0.23	0.00	1.03	6.26

Current and projected investment across sectors by region (percentage) Table 4.

Region	Year	World total	Total, USD billion	Agriculture, hunting, forestry; fishing	Mining and quarrying	Manufacturing	Electricity, gas and water supply	
World Total	2000	100	7,750	2.3	1.8	16.8	3.3	
	2030	100	22,270	1.2	0.8	15.5	1.7	
Africa	2000	1.5	118	8.2	11.2	13.2	4.0	
	2030	2.2	498	9.0	7.3	16.4	3.2	
Developing Asia	2000	10.4	804	3.9	2.2	30.2	3.9	
	2030	28.6	6,369	1.4	0.8	22.7	1.3	
Latin America	2000	4.3	332	4.8	5.3	17.9	5.8	
	2030	3.0	678	4.7	2.0	15.4	2.5	
Middle East	2000	1.8	140	4.4	14.5	9.9	2.6	
	2030	3.7	813	1.5	2.7	13.0	1.1	
OECD Europe	2000	26.7	2,067	3.0	1.5	15.1	3.6	
	2030	22.2	4,933	0.8	0.3	11.2	1.4	
OECD NA	2000	32.1	2,488	1.0	0.8	16.3	1.9	
	2030	26.8	5,970	0.6	0.4	12.4	1.5	
OECD Pacific	2000	21.9	1,695	1.2	0.6	13.8	4.1	
	2030	13.6	3,038	0.6	0.4	13.9	2.6	
Other Europe	2000	0.0	3	4.6	4.3	16.1	5.6	
	2030	0.3	56	0.6	0.1	12.3	1.4	
TE	2000	1.3	103	5.0	8.8	16.0	5.4	
	2030	2.0	448	1.6	2.9	14.4	1.8	
NAI Parties	2000	21.3	6,014	4.1	4.2	26.8	4.1	
	2030	40.9	12,918	2.1	1.5	21.0	1.4	
Al Parties	2000	77.6	1,654	1.7	1.1	14.1	3.1	
	2030	58.0	9,114	0.6	0.4	11.5	1.8	
LDCs	2000	0.5	40	10.6	7.7	10.6	7.1	
	2030	N.A	N.A.	N.A	N.A	N.A	N.A	

Data Source: UNSTAT, National Accounts Database; World Bank, 2006, World Development Indicator; OECD, ENV-Linkages Model. Abbreviations: Al Parties = Parties included in Annex I to the Convention, Dev Asia = Developing Asia, OECD = Organization for Economic Co-operation and Development, OECD NA = OECD North Amercia, TE = Transition Economies, N-AI Parties = Parties not included in Annex I to the Convention, LDCs = Least Developed Countries.

 $^{\rm a}$ Aggregated data for the three sectors.

Transport, storage and communications	Financial intermediation; real estate, renting and business activities	Construction	Wholesale retail trade, repair of motor vehicles, motorcycles, etc.; hotels and restaurants	Public administration and defense; compulsory social security	Education; health and social work; other community, social and personal services	Total
8.0	5.7	11.5	33.7	8.0	9.0	100
19.1	12.4	9.5		39.9ª		100
4.4	6.7	12.5	15.9	19.6	4.3	100
24.9	7.9	4.9		26.3ª		100
5.0	14.2	16.7	11.6	7.7	4.7	100
23.3	8.9	12.1		29.5ª		100
9.1	5.5	16.2	19.8	8.3	7.4	100
16.9	14.8	12.2		31.4ª		100
6.4	1.3	16.3	24.2	10.2	10.0	100
24.2	1.0	14.3		42.2ª		100
8.3	3.0	11.2	37.9	6.8	9.5	100
19.8	9.6	8.9		48.1ª		100
11.0	6.5	10.4	32.5	9.1	10.5	100
15.3	16.7	5.9		47.2ª		100
4.9	3.9	9.4	46.4	7.1	8.7	100
15.0	20.5	9.1		37.9ª		100
7.5	6.0	13.3	25.5	9.6	7.5	100
19.9	0.04	9.6		56.1ª		100
7.6	4.8	15.1	21.3	7.8	8.2	100
15.4	6.6	19.0		38.3ª		100
4.7	12.6	15.0	14.0	8.8	5.7	100
23.5	7.5	11.8		31.1ª		100
8.9	3.7	10.5	39.1	7.8	9.9	100
15.7	15.8	7.8		46.3ª		100
5.5	9.7	11.9	16.8	15.1	5.0	100
N.A	N.A	N.A	N.A	N.A	N.A	N.A

Table 5. Total emissions by sectors and years under the reference and mitigation scenario (Gt CO₂ eq)

Scenario	Sector	2000	2005	2010	2015	2020	2025	2030
Reference scenario	Power Generation	10.22	10.73	12.31	13.99	15.18	16.35	17.48
	Industry	4.34	5.51	6.25	6.96	7.35	7.72	8.08
	Transport	5.63	6.47	7.09	7.71	8.33	8.96	9.58
	Others	3.23	4.08	4.40	4.71	4.94	5.17	5.38
	Industrial Process	0.83	1.00	1.18	1.35	1.52	1.70	1.87
	Non-CO ₂	8.82	9.46	10.28	10.50	12.06	12.46	13.34
	LULUCF/Forestry	5.80	5.80	5.80	5.80	5.80	5.80	5.80
	Total	38.87	43.05	47.31	51.02	55.19	58.14	61.52
Mitigation scenario	Power Generation	10.22	10.61	11.44	12.04	11.42	10.04	8.08
	Industry	4.34	5.45	5.95	6.41	6.43	6.26	6.08
	Transport	5.63	6.42	6.75	7.03	7.21	7.34	7.44
	Others	3.23	4.06	4.29	4.50	4.58	4.65	4.71
	Industrial Process	0.83	0.97	1.11	1.25	1.38	1.52	1.66
	Non-CO ₂	8.82	9.46	7.49	7.74	8.78	9.29	9.94
	LULUCF/Forestry including agroforestry	5.80	5.22	4.30	2.85	0.56	-3.07	-8.80
	Total	38.87	42.18	41.33	41.81	40.35	36.04	29.11

Abbreviations: LULUCF = land use, land use change and forestry.

UNFCCC INVESTMENT AND FINANCIAL FLOWS TO ADDRESS CLIMATE CHANGE ANNEX V SUPPLEMENTARY TABLES AND FIGURES Table 6.

Difference in investment between the reference and mitigation scenario in 2030 (billions of United States dollars)

	Energy supply					
			Power Generation			
Region/Country	TD	Fossil fuels supply	Fossil fuel generation	CCS	Nuclear and renewable	-
World	-101.29	-59.05	-54.44	63.19	85.31	
OECD	-48.32	-16.91	-18.42	34.68	30.30	
OECD North America	-24.74	-10.19	-3.85	27.06	13.29	
United States	-20.35	0.00	-1.69	26.14	10.96	
Canada	-2.79	0.00	-1.53	0.03	1.69	
Mexico	-1.59	0.00	-0.64	0.88	0.63	
OECD Pacific	-5.05	-1.92	-1.99	1.91	6.39	
Japan	-2.29	0.00	-0.89	0.40	3.25	
Korea	-1.50	0.00	-1.31	0.63	1.47	
Australia and New Zealand	-1.26	0.00	0.21	0.88	1.67	
OECD Europe	-18.54	-4.79	-12.57	5.70	10.62	
Transition Economies	-5.30	-9.67	-4.30	1.68	8.50	
Russia	-0.99	-6.80	-1.73	1.19	4.40	
Other EIT	-4.30	-2.88	-2.57	0.49	4.10	
Developing Countries	-47.67	-32.47	-31.73	26.83	46.52	
Developing Asia	-33.82	-8.87	-24.28	22.08	35.92	
China	-18.03	-3.35	-10.97	17.10	19.12	
India	-6.73	-0.63	-7.14	3.19	10.61	
Indonesia	-1.24	-0.73	-0.83	1.43	0.72	
Other Developing Asia	-7.82	-4.16	-5.34	0.37	5.48	
Latin America	-6.99	-7.87	-3.03	0.57	2.15	
Brazil	-2.68	-2.68	0.11	0.12	-1.23	
Other Latin America	-4.31	-5.19	-3.14	0.45	3.38	
Africa	-3.58	-7.80	-3.12	0.73	7.05	
Middle East	-3.28	-7.93	-1.31	3.45	1.39	

Abreviation: OECD = Organization for Economic Co-operation and Development, EIT = Economies in transition, TD = transmission and distribution, CCS = carbon di-oxide capture and storage.

Industry		Building and waste	ilding and waste Transport				
Energy efficiency	CCS in industry	Non-CO ₂	Energy efficiency	Non-CO ₂	Energy efficiency	Bio fuel	Total
19.50	14.13	2.04	50.80	0.94	78.70	9.20	109.02
11.50	2.05	0.49	24.20	0.25	41.90	5.20	66.92
7.45	0.63	0.32	11.52	0.16	25.30	2.40	49.34
2.95	0.56	0.13	9.64	0.10	21.10	2.30	51.84
0.55	0.05	0.02	1.28	0.02	1.80	0.10	1.22
3.96	0.02	0.17	0.60	0.04	2.40	0.00	6.47
1.65	0.80	0.07	3.45	0.03	5.20	0.10	10.63
0.05	0.55	0.00	1.99	0.01	2.50	0.00	5.57
0.20	0.18	0.01	0.93	0.01	1.50	0.00	2.11
1.40	0.07	0.06	0.53	0.01	1.20	0.00	4.77
2.40	0.63	0.10	9.23	0.06	11.30	2.70	6.84
1.92	0.80	0.37	3.99	0.08	5.30	0.00	3.38
0.81	0.26	0.16	2.31	0.03	3.60	0.00	3.24
1.10	0.54	0.21	1.68	0.06	1.70	0.00	0.14
6.08	11.27	1.18	22.61	0.60	31.50	4.00	38.73
3.59	10.69	0.69	14.40	0.36	18.90	1.60	41.27
2.19	8.62	0.42	6.82	0.14	10.60	0.80	33.46
0.80	0.98	0.15	4.06	0.12	2.00	0.20	7.62
0.21	0.21	0.04	1.11	0.03	1.70	0.20	2.86
0.39	0.87	0.08	2.41	0.07	4.70	0.40	-2.56
0.65	0.28	0.13	1.75	0.09	4.60	2.00	-5.67
0.11	0.20	0.02	0.57	0.04	2.20	2.00	-1.22
0.54	0.08	0.10	1.18	0.05	2.50	0.00	-4.35
1.13	0.27	0.22	4.45	0.09	3.60	0.30	3.34
0.72	0.02	0.14	2.01	0.07	4.30	0.00	-0.41

Table 7.

Economic value of energy subsidies in the twenty non-OECD countries with the largest primary energy consumption (billions of United States dollars), 2005

Country	Oil products	Natural gas	Electricity	Coal	Total
Viet Nam	0.63	0.00	0.56	0.00	1.18
Nigeria	1.54	0.00	0.33	0.00	1.87
Thailand	1.74	0.48	0.86	0.33	3.40
Malaysia	3.23	0.00	0.32	0.00	3.55
South Africa	0.01	0.00	3.87	0.00	3.87
Pakistan	1.66	2.73	0.00	0.00	4.39
Argentina	0.89	4.20	1.49	0.00	6.58
Kazakhstan	1.19	3.60	0.69	1.35	6.84
Venezuela	8.10	0.00	1.13	0.00	9.22
Egypt	9.16	1.24	1.77	0.00	12.17
Ukraine	0.29	12.40	2.38	0.34	15.41
Indonesia	14.11	0.01	1.60	0.42	16.15
India	7.04	2.06	10.08	0.00	19.19
Saudi Arabia	10.07	4.27	5.40	0.00	19.74
China	6.74	3.89	6.67	7.69	24.99
Iran	24.43	9.41	2.72	0.00	36.56
Russia	0.21	25.36	14.80	0.00	40.37
Total	91.04	69.65	54.66	10.14	225.49

Source: IEA, 2006. Notes: Subsidies in Brazil, the Philippines and Chinese Taipei are not shown, as they amount to less than USD 1 billion in each case. The aggregated results are based on net subsidies only for each country, fuel and sector. Results are converted to US dollars at market exchange rates.

Table 8.

The impact of the removal of all energy consumption subsidies in selected non-OECD countries

Country	Average rate of subsidy (per cent of market price)	Annual economic efficiency gain (per cent of GDP)	Reduction in energy consumption (in per cent)	Reduction in CO ₂ emissions (in per cent)	
China	10.9	0.4	9.4	13.4	
Russia	32.5	1.5	18.0	17.1	
India	14.2	0.3	7.2	14.1	
Indonesia	27.5	0.2	7.1	11.0	
Iran	80.4	2.2	47.5	49.4	
South Africa	6.4	0.1	6.3	8.1	
Venezuela	57.6	1.2	24.9	26.1	
Kazakhstan	18.2	1.0	19.2	22.8	
Total sample	21.1	0.7	12.8	16.0	
Total world	N.A.	N.A.	3.5	4.6	

Source: IEA, 1999.

Table 9. Baseline emissions for non-CO₂ GHG in agriculture sector by region in 2000 – 2030

Country/region	2000	2005	2010	2015	2020	2025	2030
Africa	301	330	364	308	431	464	496
Annex I	1258	1 2 4 4	1 2 3 0	1263	1 2 97	1.3.31	1.364
Australia/NZ	10/	1,244	1,200	110	111	112	113
Rrazil	2/9	271	202	310	307	3/17	366
Canada	243	31	35	39	43		51
China	789	700	701		876	010	961
Eastern Europe	86	80	03	96	90	102	106
FLI-15	313	304	296	299	303	307	310
India		120	1/1		480	196	512
lanan	65	57	/141 /10		50	51	51
	210	228	246		278	205	210
L. America/Caribbean	57	60	67			70	00
		02	07				02
MIDDIE East	37	42	47	50	53	57	61
Non-EU Europe	21	21	22	23	23	24	24
Non-OECD Annex I	282	268	254	264	274	284	294
OECD	1,018	1,022	1,026	1,053	1,080	1,107	1,134
OPEC	538	451	363	373	384	395	405
Russia	237	219	201	208	215	222	229
South & SE Asia	1,141	991	842	870	898	926	954
South Korea	24	23	22	23	24	25	26
Turkey	45	48	51	54	56	59	62
Ukraine	23	25	27	29	32	34	36
United States	338	345	351	361	370	378	386
World	4,563	4,490	4,417	4,619	4,822	5,025	5,227

Abbreviations: EU = European Union, GHG = greenhouse gases, NZ = New Zealand, OECD = Organisation for Economic Co-operation and Development, OPEC = Organization of the Petroleum Exporting Countries, SE = South East

Table 10. Current/recent greenhouse gas emissions and removals in the forest sector

		WGIII/AR4 ^a	CAIT ^{b,g}	FAO ^d	Other sources ^f	WGIII/AR4	CAIT
Year	UN-ECE 2000	Flux in 1990s (various sources reported in WGIII/AR4)	2000	2000	2000 – 2005 per year (average)		
			Mt CO ₂ yr ⁻¹				
Unit/Region	$Mt CO_2 yr^{-1}$	Models	Land observations	Mt CO ₂	Forest area (x1000 ha)	Forest area lost (x1000 ha)	Forest area lost and degraded
Asia				-3.0571	566 562	1.003	
South America				-20539	852 796	-4 251	
Central America					29.5/3	-231	
and Caribboan				-500.2	29,040	-201	
Caribbean			<u>.</u>		5706	54	
Central America					23.837	-285	
Oceania				-153.8	208.034	-356	
Sub-Saharan			-576 (+235)	-13988	200,001		
Africa			-440 (+110)	1,000.0			
			-1.283 (+733)				
Middle East & N.				-52.2			
Africa						4.040	
Ainca		405	0 (, 700)		000,001	-4,040	
Europe	216	(+ 752)	0 (+733)	-32.0	998,091	100	
North America		1833 (±2.200)	210 515	228.2	677071	_101	
Nonin America	USA 610	1,000 (12,200)		000.0	017,011	101	
World	USA 610			-7,618.6	3,988,610	-7,317 ^{c,e}	Gross
							deforestation
					(In 2005		was 13.1 million
					3,952,000)		ha/year in 1990s
							(net loss 8.9
							million ha/year)
							12.9 million
							ha/year between
							2000 and 2005
							(net loss 73
							million ha/vear)
							2.4 million
		4,767 (+5,500)	-7,993 (+2,933)				ha/year in
		2,567 (+2,933)	-4.000				1990s forest
		4,913	-5,800				degradation
		9,516	-8,485				(FAO, 2006)

Abreviation: AR4 = IPCC Fourth Assessment Report, CAIT = Climate Analysis Indicators Tool, FAO = Food and Agriculture Organization of the United Nations, WG = Working Group, UN-ECE = United Nations Economic Commission for Europe.

^a The table above is from the WGIII/AR4 provides annual fluxes in Mt CO₂ yr⁻¹ from the UN-ECE for the year 2000 the table is contained in table 8;
 ^b The CAIT database also provides Mt CO₂ yr⁻¹ or 2000. In addition, the WGIII/AR4 table provides estimates for annual carbon fluxes during the 1990s based on models and on land observations;
 ^c Please note the sign reversal: WGIII/AR4 indicates a sink as a positive value, whilst the CAIT tool reports emissions. For comparison reasons, the sign of the CAIT values has been changed: emissions are reported as negative values (like the WGIII/AR4 values);
 ^d The dataset of the FAO for forest area and forest area lost remains the most complete data set available. FAO, 2006;
 ^e According to FAO (2005) equalling 4,000 Mt CO₂ yr⁻¹;
 ^t No other datasets are available to compare area estimates. The lowest level of disaggregation that can be presented and compared is on the regional level but not all regions can be compared due to different groupings of countries and/or sub-regions;
 ^g Most of the CAIT groupings differ from those used in section 9 from WGIII/AR4, but the estimate for sub-Saharan Africa from CAIT corresponds with the highest estimate based on land observations reported by WGIII/AR4. Most likely because both CAIT and WGIII/AR4: the total for those regions corresponds to the lower estimate of inversion of atmospheric transport models and the highest estimate based on land observations. In general it has to be noted that the estimates vary strongly. This was concluded by the section 9 authors of the WGIII/AR4 as well.

Table 11. Selected estimates of carbon exchange of forests and other terrestrial vegetation with the atmosphere (in Mt CO₂ per year)

	Annual carbon flux based on international statistics		Annual carbon flux during 1990s
	UN-ECE, 2000	Based on inversion of atmospheric transport models	Based on land observations
Regions			$Mt CO_2 yr^{-1}$
OECD North America		$1,833 \pm 2,200^{i}$	0 ± 1,100 ^e
Separately: Canada	340	$2,090 \pm 3,337^{\rm b}$	$293\pm733^{\rm a}$
Separatedly: USA	610		
OECD Pacific	224		0 ± 733^{a}
Europe	316	$495\pm752^{\rm f}$	0 ± 733ª 513 ^k
Countries in Transition	1,726	3,777 ± 3,447 ^b	1,100 ± 2,933 ⁱ 1,181 ± -1,588 ^g
Separately: Russia	1,572	4,767 ± 2,933 ⁱ	$1,907 \pm 469^{h}$
Northern Africa		623 ± 3,593 ^b	
Sub-Saharan Africa			-576 ± 235° -440 ± 110 ^d -1.283 ± 733ª
Caribbean, Central and South America		2,310 ± 3,887 ^b	$-1,617 \pm 972^{\circ}$ $-1,577 \pm 733^{d}$ $-2,750 \pm 1,100^{a}$ 0 ± 722^{d}
Developing Countries of South and East Asia and Middle East		-2,493 ± 2,713 ^b	-3,997 ± 1,833 ^a -1,734 ± 550° -1,283 ± 550 ^d
Separately: China		2,273 ± 2,420 ^b	-110 ± 733 ^a 128 ± 95 ^m 249 ⁿ
Global total		$4,767 \pm 5,500^{i}$ $2,567 \pm 2,933^{j}$ $4,913^{b}$ $9,516^{q}$	-7,993 ± 2,933 ^a -3,300 ÷ 7,700 ^e -4,000 ^o -5,800 ^p -8,485 ^r
Annex I Parties			-,
(excluding Russian Federation)			1,300 ^s

Source: Nabuurs G J. IPCC, 2007c. Abbreviations: OECD = Organisation for Economic Co-operation and Development, UN-ECE = United Nations Economic Commission for Europe, Annex I Parties = Parties included in Annex I to the Convention.

Notes: Positive values represent the sink of carbon, negative values represent source sign " + " indicates a range of values; sign " + " indicates error term.

^a Houghton 2003 (flux from changes in land use and land management based on land inventories).

⁶ Houghton 2003 (flux from changes in land use and land management based on land inventories).
 ⁶ Gurney et al. 2002 (inversion of atmospheric transport models, estimate for Countries in Transition applies to Europe and boreal Asia; estimate for China applies to Temperate Asia).
 ⁶ Achard et al. 2004 (estimates based on remote sensing for tropical regions only).
 ⁶ Potter et al. 2003 (inversion of atmospheric transport models regions only).
 ⁶ Potter et al. 2003 (combined use of inversion and land observations; includes forest, agricultural lands and peat lands between Atlantic Ocean and Ural Mountains,

¹ Janssens et al. 2003 (combined use of inversion and land observations; includes forest, agricultural lands and peat lands between excludes Turkey and Mediterranean isles).
 ⁹ Shvidenko and Nilson, 2003 (forests only, range represents difference in calculation methods).
 ¹ Nilson et al. 2003 (includes all vegetation).
 ¹ Ciais et al. 2000 (inversion of atmospheric transport models, estimates for Russia applies to Siberia only).
 ¹ Plattner et al. 2003 (forests only).
 ¹ Houghton et al. 2003 (forest only).
 ¹ Houghton et al. 2003 (forest only).
 ¹ Houghton et al. 2003 (lorests only).
 ¹ Houghton et al. 2004.
 ¹ Pan et al. 2005.
 ¹ Pan et al. 2005.

Fall et al. 2004. FAO 2006a (global net loss of biomass resulting from deforestation and regrowth). PICC AR4, WG I, (estimates of loss of biomass from deforestation). PICC AR4, WG I, (estimates of loss of biomass from deforestation). EDGAR database for agriculture and forestry (see Chapter 1, Figure 1.3a/b (Olivier *et al.* 2005)). These include emissions from bog fires and delayed emissions from soils after land use change. ^s Olivier et al. 2005.

Table 12.

Global Environment Facility funding for forestry sector (millions of current United States dollars)

	Forest conservatio	n	Sustainable use of forests		Sustainable forestry management		
Region	Allocated GEF funds	Leveraged co-financing	Allocated GEF funds	Leveraged co-financing	Allocated GEF funds	Leveraged co-financing	Total GEF funding
Eastern and Southern Africa	69,655	351.27	15.12	43.33	69,872	255,904	154,647
Northern Africa	5.65	17.30			11.09	112.06	30.60
Western and Central Africa	80,085	191.37	5,841	119,347	41.79	180,251	127,716
Africa	246,775	559.94	20,961	162,677	123,752	548,355	312,963
East Asia	35.93	51.85			13.21	31.42	49.14
South and Southeast Asia	79,089	153,993	16,707	20,315	46,845	94.87	212,964
Western and Central Asia	31,865	33,485	5.56	59.46	11,435	25.73	48.86
Asia	146,884	239,328	22,267	79,775	71.49	152.02	310,964
Europe	27,051	27,189	8.14	36.24	37,482	52.80	72,673
Caribbean	2,145	11,291	0.19	0.20	0.99	0.972	3,325
Central America	80.83	193,686	13.40	57,525	49.26	212,112	143.49
North America	20.79	77.63	31,837	140,297	15,905	28,615	68,532
North and Central America	145,345	282,607	45,472	198,022	66,155	241,699	256,927
Oceania			17.55	38.75	5.09	2.20	22.64
South America	153,948	212,713	22,837	18,514	47,732	101,178	224,517
Global	1.00	4.16			45.04	59.96	
World	721,003	1,326,387	137,182	533,978	396,741	1,158,212	1,254.93

Data Sources: GEF Project Database. Abreviation: GEF= Global Environment Facility.

Table 13.

Bilateral and multilateral Official Development Assistance in forestry policy and administrative management: Forestry development, Fuel wood, Forestry education and training, Forestry research and forestry services in 1990, 1995, 2000 and 2005 (millions of United States dollars)

	1990			1995		2000		2005	
Region	Bilateral	Multilateral	Other flows ^a	Bilateral	Multilateral	Bilateral	Multilateral	Bilateral	Multilateral
Africa	217.5	25.5	134.3	47.9	6.5	85.3	39.2	61.0	86.7
Al Parties	-	-	-	-	-	-	-	0.2	-
Central Asia	-	-	-	0.2	-	2.9	-	0.5	30.0
Developing Asia	100.6	474.0	75.0	122.9	193.0	148.4	37.6	359.2	1.0
Latin America	51.4	0.0	5.8	119.3	4.0	44.9	6.0	19.6	-
Middle East	1.1	-	-	-	-	0.2	-	0.6	-
North Africa	-	7.5	84.1	0.2	-	43.9	-	0.4	-
OECD North America	0.4	-	-	4.3	-	0.5	-	0.3	-
Transition Economies	-	-	-	0.6	-	5.2	-	6.7	37.0
Developing Countries ^b	370.7	499.5	215.1	290.1	203.6	278.6	82.8	440.5	87.7

Sources: CD, Creditor Reporting System. Abreviations: OECD = Organization for Economic Co-operation and Development.

^a Other flows includes lending from multillateral development institutions. ^b Africa, Developing Asia, Latin America and Middle East.

Table 14.

Official Development Assistance by region for agriculture, forestry and fisheries with extension and research components broken out in 2000 and 2005 (millions of United States dollars)

Region	Research 2000	Extension 2000	Total 2000	Research 2005	Extension 2005	Total 2005
A - : -	10 5	40.0	1 0 41 4	00.5	00.0	
Asia	13.5	46.9	1,341.4	20.5	26.6	3,475.5
Latin America	9.0	10.6	2,101.4	65.8	44.7	905.7
and the Caribbean						
Pacific	0.7	0.1	73.2	0.3	0.1	53.4
Europe	0.5	0.2	24.6	0.6	2.4	112.7
Africa	29.3	28.0	1,604.0	58.1	44.7	1,911.4
Others	0.0	0.0	0.2	0.0	0.0	0.9
Total	52.9	85.7	5,990.1	145.2	118.8	6,459.8

Sources: OECD, Creditor Reporting System

Table 15.

Official Development Assistance by region in water sector (infrastructure only) in 2000 and 2005 (millions of United States dollars)

Region	Total bilateral 2000	Total multilateral 2000	Total bilateral 2005	Total multilateral 2005	Total ODA 2000	Total ODA 2005
Africa	515	367.1	489.2	749.6	780.5	1,182.5
Developing Asia	1,631.8	653	2,384	735.4	2,022.1	2,845.2
Latin America	967.9	194.1	164.7	151.6	1,028.3	297.4
Middle East	115.8	20	1,051.5	229.6	120.1	1,160.2
OECD Europe	0.6	43.8	0.1	274.4	39.4	274.5
Transition Economies	155.8	36.3	106.2	42.5	170	136.4
World Total	3,387	1,314.4	4,195.7	2,183	4,160.5	5,896.2
NAI Parties	3,311.8	1,249.9	3,353.4	1,893.5	4,037	4,861.2
Least Developed Countries	262	275.5	509.4	373.8	475.6	824.5

Sources: OECD, Creditor Reporting System. Abbreviations: NAI Parties = Parties not included in Annex I to the Convention, OECD = Organization for Economic Co-operation and Development.

Official Development Assistance in health sector in 2000 and 2005 (millions of United States dollars) Table 16.

Region	Bilateral 2000	Multilatera 2000	Bilateral 2005	Multilatera 2005	Total ODA 2000	Total ODA 2005
South Asia	288.9	575.9	667.4	564.2	864.8	1,231.6
Southwest Asia	71.5	4.1	316.1	17.8	74.7	333.9
South East Asia	137.4	164.3	264.1	209.3	301.8	473.3
Central Asia	7.9	7.7	50.5	66.1	15.6	116.4
East Asia	51.2	6.8	45.0	35.1	57.9	80.0
LAC	271.5	451.2	343.1	301.9	722.9	645.0
Pacific	15.7	11.6	58.4	5.1	27.2	63.5
Europe	62.8	22.9	59.2	40.4	85.7	99.6
Africa	610.6	551.0	1,304.6	1,154.5	1,149.7	2,459.2
Others	4.1				4.1	
Total	1,521.6	1,795.4	3,108.4	2,394.2	3,304.5	5,502.5

Sources: OECD, Creditor Reporting System Abbreviations: LAC = Latin America and the Caribbean, ODA = Official Development Assistance.

Official Development Assistance in infrastructure in 2000 and 2005 (millions of United States dollars) Table 17.

Region	Total bilateral 2000	Total multilateral 2000	Total bilateral 2005	Total multilateral 2005	Total ODA 2000	Total ODA 2005
South Asia	366.3	1,883.1	1,251.9	2,448.2	2,249.3	3,700.0
Southwest Asia	129.7	198.0	1,417.1	201.1	327.8	1,618.2
South East Asia	1,844.1	338.4	1,681.3	416.3	2,182.5	2,097.5
Central Asia	183.1	22.5	70.8	47.9	201.9	118.7
East Asia	832.3	1,084.4	267.7	1,556.1	1,916.7	1,823.8
LAC	1,295.4	709.9	327.3	1,554.6	2,005.2	1,882.1
North America	0.0	0.0	0.0	0.0	0.0	0.0
Pacific	65.7	9.0	27.1	50.6	74.7	77.7
Europe	71.7	68.0	279.1	54.1	139.5	333.2
Africa	1,018.3	881.8	1,474.9	1,885.6	1,900.1	3,360.6
Others	0.3	0.0	0.0	0.0	0.3	0.0
Total	5,806.8	5,195.0	6,797.4	8,214.5	10,998.1	15,011.7

Sources: OECD, Creditor Reporting System Abbreviations: LAC = Latin America and the Caribbean, ODA = Official Development Assistance.

Table 18. Overview of existing carbon markets

Market	Start date	Number of projects or participants	Emissions limit 2006 Mt CO ₂ eq	Volume traded during 2006 Mt CO ₂ eq	Average price 2006 USD/Mt CO ₂ eq
Kyoto Protocol	· · ·	· · · · ·			
CDM CER primary market	2000	1,478 ^a	521ª		10.70
CDM CER secondary market		94 ^b	24 ^b	450	17.75
JI ERU market	2008	146 ^a	25ª	25	8.80
Emissions trading	2008	-	-	16	-
Protocol Parties				0	
European Union ETS Phase I	2005	1,500	2,088		19.50 ^f
European Union ETS Phase II	2008	N.A. ^c	N.A. ^c	820	23.00 ^f
Norway	2005	51	7	280 ^c	-
United Kingdom ^d	2002	32 ^d	30 to 20 ^d	-	4.10 ^e
Non-Party systems				2 ^e	
New South Wales – Australian					
Capital Territory	2003	33	53	20	11.25
Chicago Climate Exchange	2002	237	230	10	3.80
Voluntary market					
Voluntary	1995			20+	10

Sources: Capoor and Ambrosi, 2006; Capoor and Ambrosi, 2007; Ellis and Tirpak, 2006; Fenhann, 2006; Enviros, 2006. Abbreviations: CDM = Clean Development Mechanism, CER = Certified emission reductions, ERU = Emission reduction unit, ETS = Emissions trading scheme, JI = Joint Implementation.

^a Number of projects in the pipeline at the end of 2006 and the estimated annual emission reductions for those projects.
 ^b Number of projects with issued CERs and the quantity of CERs issued.
 ^c Some national allocation plans for Phase II have not yet been approved, but the number of participants will be higher, and the emissions limits will be about 8 per cent lower, than for Phase I. Contracts for Phase II allowances are already trading.
 ^d As discussed in CHAPTER VIL2, this reflects the Direct Entry component of the scheme, which accounted for most of the allowance allocation and trading activity.
 ^e During the first nine months of 2006.
 ^f Estimated.

Table 19.

Estimated capital invested for Clean Development Mechanism (CDM) projects registered and projects

that entered the pipeline during 2006 (millions	s of current United States dollars)
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Country	Estimated capital invested in projects registered during 2006	Estimated capital invested in unilateral projects registered during 2006	Estimated capital invested in projects that entered the pipeline during 2006	Estimated capital invested in unilateral projects that entered the pipeline during 2006	ODA for energy policy and renewable energy projects 2005	Private investment in renewable energy and energy efficiency 2006
Argentina	54	12	0	0	0	0
Armenia	9	3	25	0	2	0
Bangladesh		0	0	0	0	
Bolivia	0	0	60	58	1	0
Brazil	1.037	601	981	290	0	410
Cambodia	14	0	0	0	-	0
Chile		274		0	0	
China	1,270	93	12,130	3,793		3,098
Colombia	76	6	50	0	200	0
Costa Rica	2	0	31	9	0	0
Cuba	0	0	55	0	6	0
Cyprus	0	0	47	47	-	0
Dominican						
Republic	79	0	92	13	0	0
Ecuador	99	15	42	0	0	0
Egypt	13	0	328	0	274	0
El Salvador	108	0	50	0	0	0
Equatorial						
Guinea	0	0	324	324	-	0
Georgia	0	0	2	0	0	0
Guatemala	57	21	302	160	1	0
Guyana	0	0	12	12	196	0
Honduras	15	7	42	13	101	0
India	1,239	944	7,534	5,998	-	2,238
Indonesia	530	27	445	11	-	0
Israel	3	0	41	39	-	6.5
Côte d'Ivoire	0	0	30	0	-	0
Jamaica	34	0	0	0	-	0
Kyrgyzstan	0	0	2	0	0	0

Table 19.

Estimated capital invested for Clean Development Mechanism (CDM) projects registered and projects

that entered the pipeline during 2006 (millions of current United States dollars) (continued)

Country	Estimated capital invested in projects registered during 2006	Estimated capital invested in unilateral projects registered during 2006	Estimated capital invested in projects that entered the pipeline during 2006	Estimated capital invested in unilateral projects that entered the pipeline during 2006	ODA for energy policy and renewable energy projects 2005	Private investment in renewable energy and energy efficiency 2006
Lao PDR	0	0	1	0	0	0
Malaysia	431	14	455	0	_	15.3
Mexico	435	138	1,097	589	9	0
Republic of						
Moldova	8	0	2	4	4	0
Mongolia	31	31	68	31	37	0
Morocco	5	5	1	1	166	0
Nepal	3	0	8	0	-	75
Nicaragua	177	15	0	0	-	0
Nigeria	206	0	554	332	-	0
Pakistan	2	0	69	67	-	0
Panama	18	11	118	106	-	0
Papua New						
Guinea	161	161	0	0	-	0
Peru	48	47	334	328	0	0
Philippines	85	-	160	0	0	413.6
Qatar	0	0	200	200	0	0
South Africa	49	39	271	261	-	11.6
Republic						
of Korea	180	46	141	84	-	176
Sri Lanka	2	2	63	30	1	0
Tajikistan	0	0	16	16	0	0
United Republic						
of Tanzania	0	0	3	3	-	0
Thailand	0	0	85	0	4	0
Tunisia	22	0	22	0	-	0
Uruguay	-	0	8	1	5	0
Viet Nam	94	0	93	74	0	20
Total	6,886	2,512	26,465	12,894	1,226	6,509

Source: OECD, Creditor Reporting System; UNEP Risoe Database, NEF, Private Sector Investment Database. Abbreviations: ODA = Official Development Assistance Note: ("-") means less than USD 0.5 million. Capital invested is estimated using capital cost/thousand t CO₂ eq of estimated annual emission reduction for different project types estimated by the World Bank and from data in PDDs. ODA includes both bilateral and multilateral assistance.

Table 20.

Estimated capital invested for CDM projects registered and projects that entered the pipeline compared to Private Investment and ODA for Renewable energy and Energy efficiency in 2006 (millions of current United States dollar)

Total including other sectors	Estimated capital invested in projects registered during 2006	Estimated capital invested in unilateral projects registered during 2006	RE&EE investment for registered projects in 2006	
Argentina	54	12	17	
Armenia	9	3	0	
Bangladesh	3	0	0	
Bolivia	0	0	0	
Brazil	1,037	601	692	
Cambodia	14	0	14	
Chile	287	274	246	
China	1,270	93	1,243	
Colombia	76	6	42	
Costa Rica	2	0	2	
Cuba	0	0	0	
Cyprus	0	0	0	
Dominican Republic	79	0	79	
Ecuador	99	15	95	
Egypt	13	0	2	
El Salvador	108	0	102	
Equatorial Guinea	0	0	0	
Georgia	0	0	0	
Guatemala	57	21	57	
Guyana	0	0	0	
Honduras	15	7	15	
India	1,239	944	1,173	
Indonesia	530	27	442	
Israel	3	0	0	
Côte d'Ivoire	0	0	0	
Jamaica	34	0	34	
Kyrgyzstan	0	0	0	
Lao People's Democratic Republic	0	0	0	
Malaysia	431	14	429	
Mexico	435	138	232	
Republic of Moldova	8	0	8	
Mongolia	31	31	31	
Morocco	5	5	5	
Nepal	3	0	3	
Nicaragua	177	15	177	
Nigeria	206	0	0	

Private investment in renewable energy and energy efficiency 2006	ODA for energy policy and renewable energy projects 2005	RE&EE investment for projects entered in pipeline in 2006	Estimated capital invested in unilateral projects that entered the pipeline during 2006	Estimated capital invested in projects that entered the pipeline during 2006
0	0	0	0	0
0	0	10	0	
	2 0	0	0	
	1	60	58	
		968	290	
0	-	000	0	0
	0		0	70
3.098	132	11.549	3.793	12.130
0	200	3	0	50
0	0	31	9	
0	6	55	0	
0	-	47	47	47
0	0	92	13	
0	0	39	0	42
0	274	316	0	328
0	0	50	0	50
0	-	0	324	324
0	0	0	0	2
0	1	303	160	302
0	196	12	12	12
0	101	42	13	42
2,238	-	7,410	5,998	7,534
0	-	450	11	445
6.5	-	38	39	41
0		0	0	30
0	-	0	0	0
0	0	0	0	2
0	0	1	0	1
15	-	450	0	455
0	9	913	589	1,097
0	4	0	4	2
0	37	68	31	68
0	166	0	1	1
75	-	8	0	8
0	-	0	0	0
0	-	0	332	554

Table 20.

Estimated capital invested for CDM projects registered and projects that entered the pipeline compared to Private Investment and ODA for Renewable energy and Energy efficiency in 2006 (millions of current United States dollar) (continued)

Total including other sectors	Estimated capital invested in projects registered during 2006	Estimated capital invested in unilateral projects registered during 2006	RE&EE investment for registered projects in 2006	
Pakistan	2	0	2	
Panama	18	11	18	
Papua New Guinea	161	161	161	
Peru	48	47	48	
Philippines	85	-	83	
Qatar	0	0	0	
South Africa	49	39	46	
Republic of Korea	180	46	180	
Sri Lanka	2	2	2	
Tajikistan	0	0	0	
United Republic of Tanzania	0	0	0	
Thailand	0	0	0	
Tunisia	22	0	0	
Uruguay	-	0	0	
Viet Nam	94	0	1	
Total	6,886	2,512	5,681.935	

Data Source: OECD, Creditor Reporting System; UNEP Risoe Database, NEF, Private Sector Investment Database. Abbreviations: EE = Energy efficiency, ODA = Official Development Assistance, RE = Renewable energy. Notes: ("-") means less than USD 0.5 million. Capital invested is estimated using capital cost/thousand CO₂ eq of estimated annual emission reduction for different project types estimated by the World Bank and from data in project design documents (CDM-PDDs). ODA includes both bilateral and multilateral assistance.

Estimated capital invested in projects that entered the pipeline during 2006	Estimated capital invested in unilateral projects that entered the pipeline during 2006	RE&EE investment for projects entered in pipeline in 2006	ODA for energy policy and renewable energy projects 2005	Private investment in renewable energy and energy efficiency 2006
c0	67	60		0
09	07			0
118	106	118		0
0	0	0	-	0
334	328	331	0	0
160	0	157	0	414
200	200	0	0	0
271	261	253	-	12
141	84	72	-	176
63	30	63	1	0
16	16	16	0	0
3	3	0	-	0
85	0	85	4	0
22	0	0	-	0
8	1	1	5	0
93	74	93	0	20
26,465	12,894	24,201.12	1,226	6,509

Technology Transfer and Investment in/through CDM Projects in 2006 Table 21.

Project type	Number of projects	No technology transfer	Equipment only	Knowledge only	Knowledge and equipment	Average investment (USD/thousand of CO ₂ eq/year)
Afforestation	0	-	-	-	-	-
Agriculture	91	18.5	0.6	35.9	45	137.39 ^a
Biogas	32	43.2	0.9	12.1	38.4	33.12
Biomass energy	194	61.6	15.3	2.8	7.5	261.68
Cement	22	100	-	-	-	137.39 ^ª
Coal bed/mine methane	2	99.6	-	-	0.4	38.65
Energy distribution	2	7.2	-	92.8	-	137.39ª
Energy efficiency households	4	7.6	41.1	-	51.3	160.80 ^b
Energy efficiency industry	109	81.6	8.5	9.5	0.3	160.80 ^b
Energy efficiency service	10	80.5	19.5	-	-	160.80 ^b
Fossil fuel switch	32	92	8	-	-	377.65
Fugitive	7	85	4	11.1	-	137.39ª
Geothermal	6	57.4	-	18	24.6	577.83
HFCs	13	15	62.6	1.6	20	0.29
Hydro	145	81	9.7	1.4	7	306.48
Landfill gas	74	36.2	17.3	23.2	22.2	31.90
N ₂ O	3	-	92.9	-	7.1	1.47
Reforestation	2	30.9	-	-	-	113.62
Solar	5	1	99	-	-	137.39ª
Tidal	1	-	-	-	100	137.39ª
Transport	1	100	-	-	_	137.39ª
Wind	99	38.2	30.9	5.1	25.9	640.36
Total	854	34.5	41.2	6.6	16.1	

Data Source: Haites, et al., 2006, Table 7. Average investment from Philippe Ambrosi of the World Bank and Stephen Seres by personal communication. Abbreviations: HFC = Hydrofluorocarbon, N_2O = Nitrous Oxide Notes: Based on the estimated annual emission reductions. Per centages in a row may not sum to 100 per cent due to exclusion of "other" technology transfer.

^a The average for all CDM project types is used when capital cost data for the specific project type is not available;
^b Average capital cost calculated for all types of energy efficiency projects.

Table 22.

Revenue and Investments in Joint Implementation projects compared to Private investments in renewable energy and energy efficiency in 2006

Number of projects that entered the pipeline during 2006		Estimated annual emission reductions of those projects (USD million)		Estimated capital invested in 2006 projects (USD million)	Private investment in renewable energy and energy efficiency 2006 (USD million)	
Country		ERUs in thousand	USD 8.80/ERU (primary market)	USD 17.18/ERU (secondary market)		
Bulgaria	11	960	8	17	680	0
Czech Republic	2	45	-	1	118	0
Estonia	2	145	1	3	169	0
Germany	1	87	1	2	21	4,044
Hungary	2	42	-	1	180	0
Lithuania	3	123	1	2	62	0
Poland	3	192	2	3	177	33.6
Romania	7	1,194	11	21	561	0
Russian Federation	19	12,086	106	215	3,810	0
Ukraine	3	988	9	18	491	0
Total	53	14,976	132	266	6,269	4,473

Data Source: UNEP Risoe Database; NEF, private sector investment database. Note: Capital invested estimated using the factors for clean development mechanism projects shown in TABLE 19-ANNEX V. Abreviations: ERU = emission reduction unit

Table 23. Annual increase in secured capital by carbon funds

Year	Cumulative secured capital (in million EUR)	In million EUR	In million USD	Estimated value of market transactions emission reductions (in million USD)
2000	351	351	324	50
2001	701	350	313	50
2002	1,111	410	386	100
2003	1,930	819	925	300
2004	2,977	1,047	1,301	600
2005	3,835	858	1,066	2,700
2006	5,492	1,657	2,079	5,000

Source: ICF International, 2007. Note: The market value of emission reductions includes reductions for the voluntary market as well as reductions intended to earn certified emission reductions (CERs) and emission reduction units (ERUs).

Table 24. Estimates of the demand for Kyoto Units in 2010 (Mt CO₂ eq)

	Point Carbon	Capoor and Ambrosi	ICF International mid-demand ^c	ICF International range ^c
Annex I governments	140	-	318	289 to 349
European Union 15 governments	-	90	-	-
European Union ETS governments	217 ^a	228	260	211 to 322
Japan, public and private	40	70	-	-
Other governments	-	12	-	-
Estimated demand excluding Canada	397	400 ^b	578	500 to 671
Canada	-	260 ^e	5d	0 to 187
Estimated demand	-	660	583	500 to 858

Abbreviations: Annex I = Parties included in Annex I to the Convention, ETS = Emission trading scheme, ICF = Consulting group.

^a Point Carbon, CDM/JI supply: Will there be enough for everyone? 14 May 2007, converted to annual averages for 2008 to 2012. EU ETS demand is the overall limit on the use of CERs and ERUs for 21 countries based on approved national allocation plans, Carbon Market Europe, 18 May 2007. Point Carbon, Carbon 2007 – A new climate for carbon trading, March 2007, Figure 2.2 suggests a demand of about 140 Mt CO₂e for Canada and 410 Mt CO₂e for other Annex B Parties;
 ^b Capoor and Ambrosi, 2007, Table 4, converted to annual averages. Over 45 per cent of the demand excluding Canada has already been contracted;
 ^c ICF International, 2007, Table 2;

^e ICF International, 2007, Table 2; ^d This reflects the April 2007 policy announcement that the government will not purchase Kyoto units, but that firms in the emissions trading system that will begin in 2010 may use CERs for up to 10 per cent of their compliance needs; ^e Distance to target as estimated by other sources reported by Capoor and Ambrosi (2007).

Estimates of the supply of Kyoto Units in 2010 (Mt CO₂ eq) Table 25.

Source	Point Carbon ^a	Capoor and Ambrosi ^b	ICF International mid-supply ^c	ICF International range ^c	
Clean Development Mechanism					
April 2007 pipeline	460	-	-	-	
Additional projects	270	-	-	-	
Projected reductions	700	-	-	-	
Estimated CERs issued	330	300 ^b	-	-	
Joint Implementation					
April 2007 pipeline	46	-	-	-	
Additional projects	55	-	-	-	
Projected reductions	101	-	-	-	
Estimated ERUs issued	60	40	-	-	
Sub-total CERs and ERUs	390	340	340	220 to 450	
Surplus AAUs					
Russia	950 ^d	640	-	-	
Ukraine	300 ^d	440	-	-	
Other	400 ^d	340	-	-	
Sub-total AAUs	1,650	1,420	400 [°]	240 to 600°	
Total	2,040	1,785	740	460 to 1,050	

Abbreviations: AAUs = assigned amount units, ERUs = emission reduction units, CERs = certified emission reductions.

^a Point Carbon, CDM/JI supply: Will there be enough for everyone? 14 May 2007, converted to annual averages for 2008 to 2012;
 ^b Capoor and Ambrosi, 2007, Table 4, converted to annual averages. CERs are based on the March 2007 CDM Pipeline (Fenhaan) adjusted for observed yields and no allowance for additional projects;
 ^c ICF International, 2007, table 2, AAUs are only units sold through Green Investment Schemes and are converted to annual averages;
 ^d Point Carbon, Carbon 2007 – A new climate for carbon trading, March 2007, Figure 2.2 converted to annual averages;
 ^e Point Carbon and Capoor and Ambrosi project ten supply of CERs and ERUs from the projects in the pipeline in early 2007. They discount the project estimates of emission reductions to calculate the CERs and ERUs issued. Point Carbon adds CERs and ERUs from projects in its database that have not yet released a project design document (PDD). That increases its estimate of the supply of CER/ERU supply to 390 Mt CO₂ eq per year compared with 340 Mt CO₂ eq for Capoor and Ambrosi and ICF International.

Table 26. Model estimates of the maximum demand in 2030

Model	Market size ^a (Mt CO ₂ eq/year)	Market price ^b (2000 USD billion)	Annual purchases ^c (2000 USD billion)	Annex I and/or B commitment ^d (percentage below 1990)
AIM	4,648	28.09	131	20
AMIGA	5,233	60.00	314	43
EDGE	4,700	3.54	17	7
EPPA	12,126	19.49	236	-81
FUND	16,920	109.61	1,855	105
GEMINI	7,856	11.03	87	31
GRAPE	3,262	5.89	19	5
GTEM	13,176	43.93	579	76
IMAGE	6,402	19.00	122	31
IPAC	6,287	13.64	86	38
MERGE	1,645	3.69	6	-17
MiniCAM	6,455	14.30	92	31
PACE	986	0.53	0.5	31
POLES	5,806	26.24	152	32
SGM	10,369	21.50	223	49
WIAGEM	10,450	5.38	56	55
Median ^e	6,345	16.65	107	31

Data Source: Links to websites with results for the individual models are provided at <<u>http://www.stanford.edu/group/EMF/projects/group21/EMF21ReportingResults.pdf</u>>. Abbreviations: AIM = Asian-Pacific Integrated Model, AMIGA = All Modular Industry Growth Assessment, EDGE = European Dynamic Equilibrium Model, EPPA = Emission Projection and Policy Analysis Model, FUND = Climate Framework for Uncertainty, Negotiation and Distribution, GEMINI = General Equilibrium Model of International Interaction for Economy-Energy-Environment, GRAPE = Global Relationship Assessment to Protect the Environment, GTEM = Global Trade and Environment Model, IMAGE = Integrated Model to Assess The Global Environment, IPAC = Integrated Projection Assessments for China, MERGE = Model for Evaluating Regional and Global Effects of GHG Reductions Policies, MiniCAM = Mini-Climate Assessment Model, PACE = Policy Analysis With Computable Equilibrium, POLES = Prospective Outlook on Long-Term Energy Systems, SGM = Second Generation Model, WIAGEM = World Integrated Applied General Equilibrium Model.

^a The market size is calculated as the emissions of non-Annex I Parties under the reference scenario less the emissions of non-Annex I Parties under the multi-gas mitigation scenario. In other words non-Annex I Parties are assumed to sell all potential emission reductions with a marginal cost below the market price. Or equivalently, the models equate the MACs of mitigation across countries, between at home reductions in Annex I Parties and offsetting in developing ctries;

of mitigation across countries, between at home reductions in Annex I Parties and o unsetung in developing cures; ⁶ The market price is the marginal abatement cost reported for the multi-gas mitigation scenario; ⁶ Annual purchases is the market size multiplied by the market price; ^d The Annex I commitment is the emissions of Annex I Parties under the multi-gas mitigation scenario less the market size (purchases from non-Annex I Parties) expressed as a reduction from 1990 Annex I emissions. A negative value indicates the commitment is higher than the 1990 emissions; ^{HIII} are been expressed by a particular distributed as in this case – market size and nrice can not be less than zero – the median (half of the values above and below) is a better indicator e When values can not be symmetrically distributed as in this case - market size and price can not be less than zero - the median (half of the values above and below) is a better indicator of the central value than the average.

Maximum annual emission reduction potential in Parties not included in Annex I to the Convention, in 2030 Table 27.

	Estimated annual emission reductions in current CDM pipeline (Mt CO_2 eq)	Maximum annual emission reduction potential in non-Annex I Parties in 2030 (Mt CO_2 eq)
Biofuels	30	250 ^b
Coal bed/mine methane	20	-
Energy efficiency and fuel switching	55	2,000 ^b
HFC/PFC destruction	81	0 ^c
N ₂ O destruction	42	65 ^d
Reforestation	1	1,300 ^e
Renewable energy	52	900 ^b
Other (mainly landfill gas)	52	-
Reduced deforestation	-	2,000 ^e
CO ₂ capture and storage	-	1,200 ^b
Total	333	7,715

Abbreviations: HFC = Hydrofluorocarbon, PFC = Perfluorocarbon, N₂O - Nitrous Oxide, CO₂ = Carbon oxide.

^a CDM Pipeline, 31 May 2007;
 ^b Difference between reference scenario and beyond alternative policies scenario;
 ^c Phase out of ozone depleting substances will largely eliminate waste HFCs/PFCs by 2030;
 ^d Most reductions are at adipic acid plants and four of the six plants in non-Annex I Parties are already registered. The rest, about 13 Mt CO₂e, is at plants producing nitrate for fertilizers;
 ^e Calculated from Table 9.3 in the report by Eveline Trines for reductions at a cost of less than USD 20/t CO₂.

Projects approved under the Special Climate Change Fund Adaptation Portfolio Table 28.

Country / Region	Project Title	IA/EA	Expected SCCF Grant (USD million)	Expected Co-financing (USD million)	Expected Total Financing (USD million)
Ecuador	Adaptation to CC through effective		0.05	0	0.05
Ethiopia	Water governance Coping with drought and CC	UNDP	3.65	1.87	9.65 2.95
Guyana	Conservancy Adaptation Project	World Bank	4.14	16.2	20.3
Kenya	Adaptation to CC in arid lands (KACCAL)	World Bank/UNDP	7.40	44.84	52.24
Mozambique	Coping with drought and CC	UNDP	1.04	0.93	1.97
Regional (Bolivia, Equador, Peru)	Design and implementation of pilot CC adaptation measures in the Andean region	World Bank	8.16	20.1	28.26
Tanzania	Mainstreaming CC in integrated water resources management in the Pangani river basin	UNDP	1.09	1.57	2.66
Zimbabwe	Coping with drought and CC	UNDP	1.07	1.16	2.22
Total			27.63	92.67	120.32

Sources: Information is provided by the GEF Secretariat. Abbreviations: CC = Climate Change, EA = Executing Agency, IA = Implementing Agency, SCCF - Special Climate Change Fund, UNDP = United Nations Development Programme.

Table 29. Projects in the pipeline of the Special Climate Change Fund Adaptation Portfolio

Country/region	Project Title	IA/EA	Expected SCCF grant (USD million)	Expected co-financing (USD million)	Expected total financing (USD million)					
China	Mainstreaming adaptation to CC into water re- sources management and rural development	World Bank	5.85	50	55.8					
Philippines	CC adaptation project	World Bank	5.88	50	55.8					
Regional	Pacific Islands Adaptation to CC project	UNDP	12.64	70.8	83.4					
(Cook Islands,	(PACC)									
Micronesia, Fiji,										
Nauru, Papua										
New Guinea,										
Samao, Solomon										
Islands, Tongo,										
Tuvalu, Vanuatu)										
Total			24.37	170.8	195					

Abbreviations: CC = Climate Change, EA = Executing Agency, IA = Implementing Agency, PACC = Pacific islands adaptation to climate change project, SCCF = Special Climate Change Fund, UNDP = United Nations Development Programme.

Project in the pipeline of the Least Developed Countries Fund Adaptation Program, as of August 2007 Table 30a.

Country	RegioProject Titlen	IA/EA	Expected LDCF Grant (USD million)	Expected Co-financing (USD million)	Expected Total Financing (USD million)
Bangladesh	Strengthening adaptive capacities to				
0	address climate change threats on				
	sustainable development strategies for				
	coastal communities in Bangladesh	UNDP	3.4	6.22	9.62
Bhutan	Reduce climate change-induced risks				
	and vulnerabilities from glacial lake				
	outbursts in the Punakha-Wangdi and				
	Chamkhar Valleys	UNDP	3.96	3.50	7.49
Malawi	Climate Adaptation for Rural				
	Livelihoods and Agriculture (CARLA)	AfDB	3.55	24.39	27.95
Mauritania	Reducing vulnerability of arid				
	oasian zones to climate change				
	and variability through improved				
	watershed management	UNEP	1.83	1.41	3.24
Niger	Implementing NAPA priority				
	interventions to build resilience and				
	adaptive capacity of the agriculture				
	sector to climate change in Niger	UNDP	2.3	4.27	6.57
Samoa	Integrated Climate Change Adaptation				
	in Samoa (ICCAS)	UNDP	2.29	2.01	4.3
Total			17.33	41.8	59.13

Abbreviations: AfDB = African Development Bank, CC = Climate Change, EA = Executing Agency, IA = Implementing Agency, NAPA = National Adaptation Programmes of Action, UNDP = United Nations Environment Programme

Table 30b.

Three Project Identification Forms ready for submission to the Least Developed Counrties Fund Adaptation Programme

Country	RegioProject Titlen	IA/EA	Expected LDCF Grant (USD million)	Expected Co-financing (USD million)	Expected Total Financing (USD million)
Cambodia	Building capacities to integrate water resources planning				
	in agricultural development	UNDP	2.14	2.01	4.15
Eritrea	Integrating climate change risks into community based livestock management in the northwestern				
	lowlands of Eritrea	UNDP	3	3.4	6.4
Djibouti	Reducing impacts and vulnerability of coastal productive systems in Djibouti	UNEP	2.27	1.97	4.24
Total			7.81	7.38	15.20

Note: Information is provided by the GEF Secretariat. Abbreviations: EA = Executing Agency, IA = Implementing Agency, UNDP = United Nations Development Programme, UNEP = United Nations Environment Programme.

Table 31. Renewable Energy Policies and Government Support in Developing Countries

Country	Policy name	Policy type	Technology	Renewable energy target
Brazil	The Brazilian Renewable Energy Incentive Programme (PROINFA)	 Guaranteed prices/feed-in Obligations Tradeable certificates Third Party finance 	– Onshore wind – Bioenergy – Hydropower	Additional 3,300 MW from wind, small hydro, biomass by 2016; 15 per cent of primary energy supply by 2020
	National Programme for Energy Development of States and Municipalities (PRODEEM)	- Rural electrification	 All technologies simultaneously 	
	National Rural Electrification Programme	- Rural electrification	 All technologies simultaneously 	
China	Brightness Programme	– Capital grants	 On-shore wind Solar photovoltaics 	
	The People's Republic of China Renewable Energy Law	 General energy policy Guaranteed prices/feed-in Obligations R&D and Development Regulatory and administrative rules 	 All technologies simultaneously 	 3.3 GW by 2006 from wind, biomass and mini-hydro. To reach 120 GW of RE by 2020. 10 per cent of energy from RE by 2010, 16 per cent by 2020. Wind: 30 GW by 2030 Solar PV: 300 MW by 2010, 1.8 GW by 2030
	Reduced VAT and Income Tax	 Excise tax exemptions Sales tax rebates Tax credits 	– Onshore wind	
	Wind Power Concessions Programme	 Bidding systems Guaranteed prices/feed-in 	– Onshore wind	
	Energy Efficiency	 Non-mandatory targets: energy intensity to fall by 20 per cent and major pollutants discharge by 10 per cent during the 11th Five Year Plan (2006 to 2010) 	– All/energy efficiency	
India	Policy and Economic Incentives for Investment in Renewable Energy Sources (Model Renewable Energy Law in planning)	 FDI & joint ventures Depreciation allowance Income tax holiday Excise & customs incentives Planning exemptions Loans Feed-in tariffs due to be introduced for wind and solar (announced May 2007) 	- All technologies simultaneously	10 per cent of additional electricity capacity by 2012 (excluding large hydro): increasing to 20 per cent by 2020, 10 GW RE by 2012

Table 31. Renewable Energy Policies and Government Support in Developing Countries (continued)

Country	Policy name	Policy type	Technology	Renewable energy target
India	Incentives for Investment in Wind Power Generation	 Concessional import duties Accelerated depreciation Sales tax & excise duty relief Soft loans Income tax holiday Wheeling charges Buy-back facility 5 per cent annual tariff escalation Financial incentives for demonstration projects 	– Wind	
	Incentives for Investment in Small Hydro Power Generation	 Survey & investigation subsidies Project development subsidies Renovation, modernisation & capacity upgrade financial support Term loans 	– Small hydro power	
Mexico	Accelerated Depreciation for Environmental Investment (Renewable Energy Law in Congress – not yet implemented)	 Investment tax credits Tax credits 	– All technologies simultaneously	
	Grid Interconnection Contract for Renewable Energy	– Regulatory & administrative affairs	 Hydropower Offshore wind Onshore wind Solar photovoltaics Solar concentrating power 	
	Project of Bill to Promote Renewable Energy	- General energy policy	 All technologies simultaneously 	
	Project of Ecological Norm for Wind Farms	 Regulatory & administrative affairs 	– Onshore Wind	
	Project of Electricity Reform in Connection with Renewable Energy	 Regulatory & administrative affairs 	 All technologies simultaneously 	
	Public Electricity Services Law	- General energy policy	 All technologies simultaneously 	
	Methodology to Establish Service Charges for Transmission of Renewable Energy	 Regulatory & administrative affairs 	 All technologies simultaneously 	
	Wheeling Service Agreement for Electricity from Renewable Energy Sources	 Regulatory & administrative affairs 	– All technologies simultaneously	

Renewable Energy Policies and Government Support in Developing Countries (continued) Table 31.

Country	Policy name	Policy type	Technology	Renewable energy target
Thailand	Strategic Plan for Renewable Energy Development	 General energy policy Machinery import duty exemptions Corporate income tax exemption 	 Solar Wind Biomass Biogas Hydro Biofuels Geothermal Fuel cells Energy efficiency 	8 per cent of primary energy by 2011 (excluding rural biomass)
Turkey	Electricity Market Licensing Regulation Law on Utilisation of Renewable Energy Resources for the Purpose of Generating Electrical Energy – No. 5346	 Capital grants General energy policy 	 All technologies simultaneously All technologies simultaneously 	Targeted 2 per cen of electricity from wind by 2010
	Project of Ecological Norm for Wind Farms Project of Electricity Reform in Connection with Renewable Energy Public Electricity Services Law	 Regulatory & administrative affairs Regulatory & administrative affairs General energy policy 	 Onshore wind All technologies simultaneously All technologies simultaneously 	
	Methodology to Establish Service Charges for Transmission of Renewable Energy	- Regulatory & administrative affairs	– All technologies simultaneously	

Source: Greenwood C. et al., 2007. Abbreviations: FDI = Foreign direct investment, R&D = Research & Development, RE = Renewable energy, VAT = Value added tax.

Table 32. Summary of Major Policy Recommendations Across Mitigation and Adaptation Sectors

	Mitigation/Industry	Mitigation/Forestry	Mitigation/Agriculture	Investment in RE/EE
Information gaps				
Required disclosure	Product labeling			
Voluntary reporting	EE certification	Wood certification	Agriculture product	
	Green building standards		certification	
Government provided information	EE performance/options	Sustainable management	Sustainable management	Incubator support (info/networks)
Policy barriers to entry				
Monopoly regulation	Utility EE investment			Leveling field Feed-in tariffs
Perverse subsidies	↓ for energy use	↓ for forest clearance		
Perverse standards	Building codes			Expedited permitting
	Zoning for density			
Externalized costs				
Civil liability				
Command & control	EE performance standards	Bans on illegal logging	Farming practices/	Portfolio standards
			inputs/emissions	Fuel standards
Taxes/charges	Energy pricing			Carbon tax
Externalized benefits				
Tradable rights	White tags	REDD/For. mitigation	Reduced tillage	Carbon market expansion
		Afforesta/reforesta	Increased storage	
		Energy/structural products	Animal wastes	
			Bioenergy crops	
Government incentives	Early retirement	Sustainable land	Land restoration	RE/EE technologies &
	EE equipment purchase	management/ecosystem	EE equipment	projects
		services		Retail fin models
Government provision	R&D on EE technologies	Protected areas	Procurement	R&D on new technologies
	Public buildings	Procurement		Public procurement
		Forest Financing		
		Mechanism: grants		
Other comments on	 Hugely decentralized 	 Land tenure a major 	- Need understand global	– Mainstream EE/RE
sector, policies and	sector	issue in tropics	agriculture markets	 Policy-driven market
markets	 Split incentives 	 Most investment not 	– Lots of energy in	 Lacking projects, not
	builders/occupants	related to climate	agriculture production/	finance
	- Need integrated	- Most from private sector	transport	
	approach to building EE	- Need devolve	- No baseline/mitigation	
	– Much investment from	authority/funds	scenarios	
	retained earnings			

Table 32. Summary of Major Policy Recommendations Across Mitigation and Adaptation Sectors (continued)

	Mitigation/Transport	Adaptation/Infrastructure	Adaptation/Ecosystems	Adaptation/Water
Information gaps				
Required disclosure	Fuel use for autos	In EIAs for buildings		Water use efficiency
Voluntary reporting		Green buildings		
Government provided info	Transport options	Adaptation plans	Value of ecosystems	Weather forecasts
		Warnings/responses to		Climate awareness
		weather events		Drought management
				plans
Policy barriers to entry				·
Monopoly regulation				
Perverse subsidies	↓ for energy use,	↓ for buildings in low	↓ for agriculture	\checkmark for inefficient water use
	highways, sprawl	areas	expansion, energy,	
			transport, drainage, water	
Perverse standards	Land use/sprawl	Building codes	Land use/sprawl	Building codes
Externalized costs				
Civil liability			For damage to	
			ecosystems	
Command & control	Vehicle standards	Storm water collection	Pollution/land use/	Efficiency/reuse standards
	Fuel standards	Limits on building	species controls	Watershed land
	Land use controls	locations		management standards
		Building standards		
Taxes/charges	Congestion charges	For new developments in	On forest conversion	For water use; income
	Fuel taxes	low areas		support
Externalised benefits				
Tradable rights	Fleet efficiency		For ecosystem	Water banking/trading
			services/REDD	
Government incentives	EE transit technologies	Insurance products	For habitat restoration/	Efficiency/reuse
			protection	investments
Government provision	Mass transit	Responses to weather	Protected areas	Desalination
	R&D in technologies	events		Reservoirs/networks
				Forested watersheds
Other comments on		- Capacity/willingness to		– Mostly public domestic
sector, policies and		act (national/local):		sources
markets		adaptation deficit		– Long-lived assets, major
		– Need mainstream		investment risks
		– Durban Adaptation		- Intensely political
		Strategy: across city		
		- International > local		
		costings		
		- Need local studies		

Table 32.

Summary of Major Policy Recommendations Across Mitigation and Adaptation Sectors (continued)

	Adaptation/Agriculture	Adaptation/Health	Energy Subsidies	
Information gaps				
Required disclosure				
Voluntary reporting				
Government provided	Disaster mitigation/	Promote health programs	Communications	
information	adaptation/land use		regarding changes in	
	planning/modeling		subsidy programs	
	Climate forecasts			
	Pest/disease tracking			
	Training/cap building			
Barriers to entry				
Monopoly regulation			Allow access to grid,	
			pricing	
Perverse subsidies	Excessive water use		Eliminate for fossil fuels	
Perverse standards			Reduce trade restrictions	
Externalized costs				
Civil liability				
Command & control	Ban illegal logging		RE portfolio standards	
	Controls on land use			
	Product storage requests			
Taxes/charges	Excessive water use		Carbon taxes	
Externalized benefits			·	
Tradable rights	Water rights			
Government incentives	Efficient water use		Add for RE/EE	
	Transition support			
Government provision	R&D on methods/	Immunizations	Direct income support	
	crop lines	Water supply & sanitation	Shift R&D to RE/EE	
	Protected areas			
	Climate insurance			
Other comments on	Adaptation actions not		Phasing/timing of	
sector, policies and	in response to climate		subsidies key	
markets	alone – need mainstream			
	Adaptive cap varies			
	Land tenure an issue in			
	tropics			

Source: Adapted from review of sectoral papers prepared on mitigation and adaptation for the background paper (see list of references of the sectoral papers). Abbreviations: EE = Energy efficiency, EIAs = Environment Impact Assessments, RE = Renewable energy, REDD = Reducing emissions from deforestation in developing countries, R&D = Research&Development.

Gross fixed capital formation by region in Agriculture, forestry and fisheries sectors (millions of United States dollars) Table 33.

Bosion	Agriculture	Forestry	Fishery	Total	Agriculture	Forestry	Fishery	Total
Region	2005	2005	2005	2005	2030	2030	2030	2030
South Asia	18.8	5.6	1.3	25.7	48.5	17.6	2.0	68.1
Southwest Asia	4.9	1.2	0.4	6.5	15.2	13.4	0.7	29.3
Southeast Asia	3.9	4.2	0.5	8.5	9.6	11.1	0.8	21.5
Central Asia	4.8	0.5	0.2	5.5	13.7	2.0	0.3	16.0
East Asia	70.6	46.7	4.4	121.6	145.9	119.4	6.1	271.3
LAC	42.3	10.4	0.9	53.6	84.6	29.1	1.3	115.0
North America	87.7	71.3	0.5	159.5	140.1	102.0	0.7	242.8
Pacific	6.8	3.1	0.1	10.0	12.0	4.9	0.1	17.0
Europe	78.8	41.1	3.0	122.9	145.6	78.2	3.8	227.0
Africa	22.7	6.5	1.1	30.3	50.3	21.9	2.2	74.5
Total	341.2	190.6	12.3	544.1	665.5	399.6	18.1	1083.2
Developing countries	132.3	51.1	6.7	190.1	298.1	172.1	11.1	481.2
High income countries	208.9	139.5	5.6	354.0	367.5	227.5	7.1	602.0

Source: OECD, ENV-Linkage model Abrevitation: LAC = Latin America and Caribbean.

Table 34.

Official Development Assistance for policy development and administration in 2000 by economic sector and region (millions of United States dollars)

Region	Africa	Asia	Latin and Central America	West Asia	Transition economies	Other areas	Total
Energy policy and administration	205.7	870.6	218.5	41.1	37.7	1.1	1,374.6
Of which multilateral, per cent	64.9	89.7	98.8	27.8	10.8	-	83.3
Agricultural policy and administration	621.7	856.9	1 254.5	42.4	76.9	4.3	2,856.8
Of which multilateral, per cent	50.6	94.0	88.7	4.9	61.7	-	79.9
Environmental policy and administration	98.1	764.1	337.0	3.0	30.5	0.0	1,232.7
Of which multilateral, per cent	23.7	89.4	89.9		5.8	-	82.1
Fishing policy and administration	10.1	10.3	26.1	8.0	1.5	0.1	56.1
Of which multilateral, per cent	7.3	61.8	21.6	-	-	-	22.7
Forestry policy and administration	51.0	11.1	25.2	7.2	3.9	19.9	118.3
Of which multilateral, per cent	44.6	-	16.0	-	-	62.7	33.2
Health policy and administration	563.3	365.8	142.8	16.4	24.4	22.5	1,135.2
Of which multilateral, per cent	73.7	89.1	68.7	-	42.6	50.1	75.8
Industrial policy and administration	6.2	0.4	0.1	-	0.0	-	6.7
Of which multilateral, per cent	-	-	-	-	-	-	-
Transport policy and administration	324.9	340.3	221.3	2.5	120.2	0.3	1,009.6
Of which multilateral, per cent	83.5	87.7	86.7	-	98.4	-	87.2
Water Resources policy and administration	74.1	43.7	421.4	269.1	2.5	6.2	817.0
Of which multilateral, per cent	2.3	60.3	93.5	60.7	-	103.1	72.5
TOTAL	1,955.0	3,263.3	2,646.9	389.8	297.6	54.5	8,607.1
Of which multilateral, per cent	60.5	89.7	87.9	45.4	61.1	55.3	79.3

Source: OECD Creditor Reporting System

Table 35. Investment flows by the economy sectors (percentage)

Table 35.1 Agriculture, hunting, forestry and fishing

Region	World GFCF	Domestic investment (private & public)	FDI flows	Debt (international borrowings)	Bilateral ODA	Multilateral ODA	Total	Total GFCF (USD billions)
Africa	5.51	96.16	0.97	0.00	1.79	1.07	100.0	10
Developing Asia	17.95	96.02	2.53	0.00	0.88	0.56	100.0	31
Latin America	9.02	98.53	1.04	0.00	0.39	0.04	100.0	16
Middle East	3.49	99.95	0.00	0.00	0.05	0.00	100.0	6
OECD Europe	35.18	84.79	0.13	15.08	0.00	0.00	100.0	62
OECD North America	13.67	98.52	1.43	0.05	0.00	0.00	100.0	24
OECD Pacific	12.10	98.58	0.81	0.62	0.00	0.00	100.0	21
Other Europe	0.05	100.00	0.00	0.00	0.00	0.00	100.0	0
Transition Economies	3.02	97.60	0.85	0.00	0.23	1.32	100.0	5
Global Total	100.00	93.14	0.97	5.39	0.30	0.20	100.0	175
NAI Parties	38.65	96.88	1.72	0.19	0.76	0.45	100.0	68
Al Parties	59.64	91.05	0.04	8.91	0.00	0.00	100.0	104
Least Developed								
Countries	2.42	92.02	2.48	0.00	2.95	2.55	100.0	4

Source: Estimations by UNFCCC secretariat based on data from: UNSTAT, National Accounts Database; BIS, 2007; World Bank, 2006, World Development Indicator; OECD, CRS. Abbreviations: Al Parties = Parties included in Annex I to the Convention, FDI = Foreign direct investment, NAI Parties = Parties not included in Annex I to the Convention, ODA = Official Development Assistance, OECD = Organisation for Economic Co-operation and Development.

Table 35.2 Mining and quarrying

Region	World GFCF	Domestic investment (private & public)	FDI flows	Debt (international borrowings)	Bilateral ODA	Multilateral ODA	Total	Total GFCF (USD billions)
Africa	9.49	86.25	12.34	0.00	0.97	0.44	100.0	13
Developing Asia	12.40	90.76	9.04	0.00	0.20	0.00	100.0	17
Latin America	12.67	55.65	43.76	0.05	0.54	0.00	100.0	18
Middle East	14.58	100.00	0.00	0.00	0.00	0.00	100.0	20
OECD Europe	22.95	56.41	43.28	0.31	0.00	0.00	100.0	32
OECD North America	13.68	12.26	87.16	0.57	0.00	0.00	100.0	19
OECD Pacific	7.58	70.34	29.66	0.00	0.00	0.00	100.0	11
Other Europe	0.05	100.00	0.00	0.00	0.00	0.00	100.0	0
Transition Economies	6.59	81.21	18.75	0.00	0.04	0.00	100.0	9
Global Total	100.0	66.44	33.18	0.16	0.19	0.04	100.0	139
Al Parties	48.5	98.87	0.82	0.31	0.00	0.00	100.0	68
NAI Parties	49.78	81.79	17.75	0.00	0.38	0.09	100.0	69
Least Developed								
Countries	2.19	87.27	6.87	0.00	3.96	1.90	100.0	3

Source: Estimations by UNFCCC secretariat based on data from: UNSTAT, National Accounts Database; BIS, 2007; World Bank, 2006, World Development Indicator; OECD, CRS. Abbreviations: AI Parties = Parties included in Annex I to the Convention, FDI = Foreign direct investment, NAI Parties = Parties not included in Annex I to the Convention, ODA = Official Development Assistance, OECD = Organisation for Economic Co-operation and Development.

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Table 35.3 Manufacturing

Region	World GFCF	Domestic investment (private & public)	FDI flows	Debt (international borrowings)	Bilateral ODA	Multilateral ODA	Total	Total GFCF (USD billions)
Africa	120	89.18	636	3.34	1.07	0.05	100.0	16
Developing Asia	18.66	81.35	18.02	0.56	0.07	0.00	100.0	243
Latin America	4.56	80.46	15.53	3.84	0.13	0.04	100.0	59
Middle East	1.07	75.24	24.75	0.00	0.01	0.00	100.0	14
OECD Europe	24.04	62.92	25.35	11.73	0.00	0.00	100.0	313
OECD North America	31.15	55.01	36.57	8.42	0.00	0.00	100.0	405
OECD Pacific	18.00	99.25	0.05	0.70	0.00	0.00	100.0	234
Other Europe	0.02	-175.61	0.00	275.61	0.00	0.00	100.0	0
Transition Economies	1.29	85.80	14.03	0.05	0.12	0.00	100.0	17
World Total	100.00	71.93	22.09	5.95	0.03	0.00	100.0	1,301
NAI Parties	34.03	84.14	15.29	0.46	0.09	0.01	100.0	443
Least Developed								
Countries	0.33	75.45	11.61	12.27	0.67	0.00	100.0	4

Source: Estimations by UNFCCC secretariat based on data from: UNSTAT, National Accounts Database; BIS, 2007; World Bank, 2006, World Development Indicator; OECD, CRS. Abbreviations: AI Parties = Parties included in Annex I to the Convention, FDI = Foreign direct investment, NAI Parties = Parties not included in Annex I to the Convention, ODA = Official Development Assistance, OECD = Organisation for Economic Co-operation and Development.

Table 35.4 Electricity, gas and water supply

Region	World GFCF	Domestic investment (private & public)	FDI flows	Debt (international borrowings)	Bilateral ODA	Multilateral ODA	Total	Total GFCF (USD billions)
Africa	1.83	80.04	0.00	0.00	12.37	7.59	100.0	5
Developing Asia	12.28	75.59	8.57	3.61	7.51	4.72	100.0	32
Latin America	7.46	39.42	28.80	26.71	3.64	1.43	100.0	19
Middle East	1.40	93.29	0.00	0.00	5.88	0.82	100.0	4
OECD Europe	29.23	47.35	15.42	37.18	0.00	0.05	100.0	75
OECD North America	18.85	65.46	22.46	11.54	0.48	0.05	100.0	48
OECD Pacific	26.71	96.97	0.71	2.32	0.00	0.00	100.0	69
Other Europe	0.04	-752.29	0.00	852.29	0.00	0.00	100.0	0
Transition Economies	2.20	92.12	2.95	0.72	3.43	0.78	100.0	6
World Total	100.00	68.81	12.19	16.44	1.67	0.88	100.0	257
Al Parties	72.49	81.41	0.04	18.52	0.03	0.01	100.0	186
NAI Parties	26.07	77.72	12.63	5.76	0.60	3.29	100.0	67
Least Developed								
Countries	1.10	63.48	6.28	0.00	12.16	18.09	100.0	3

Table 35.5 Wholesale retail trade, repair of motor vehicles, motorcycles, etc.; hotels and restaurants

Region	World GFCF	Domestic investment (private & public)	FDI flows	Debt (international borrowings)	Bilateral ODA	Multilateral ODA	Total	Total GFCF (USD billions)
Africa	0.84	96.57	3.43	0.00	0.00	0.00	100.0	5
Developing Asia	6.47	68.57	27.80	3.64	0.00	0.00	100.0	40
Latin America	4.86	80.07	9.33	10.60	0.00	0.00	100.0	30
Middle East	1.44	97.49	2.51	0.00	0.00	0.00	100.0	9
OECD Europe	27.61	60.36	15.04	24.61	0.00	0.00	100.0	172
OECD North America	44.18	56.40	25.95	17.65	0.00	0.00	100.0	275
OECD Pacific	13.31	88.03	9.19	2.78	0.00	0.00	100.0	83
Other Europe	0.02	-397.71	0.00	497.71	0.00	0.00	100.0	0
Transition Economies	1.28	77.71	22.29	0.00	0.00	0.00	100.0	8
World Total	100.00	64.74	19.44	15.82	0.00	0.00	100.0	621
Al Parties	86.12	63.53	19.23	17.24	0.00	0.00	100.0	535
NAI Parties	12.51	87.15	10.66	2.18	0.00	0.00	100.0	78
Least Developed								
Countries	0.35	98.74	1.26	0.00	0.00	0.00	100.0	2

Source: Estimations by UNFCCC secretariat based on data from: UNSTAT, National Accounts Database; BIS, 2007; World Bank, 2006, World Development Indicator; OECD, CRS. Abbreviations: Al Parties = Parties included in Annex I to the Convention, FDI = Foreign direct investment, NAI Parties = Parties not included in Annex I to the Convention, ODA = Official Development Assistance, OECD = Organisation for Economic Co-operation and Development.

Table 35.6 Construction

Region	World GFCF	Domestic investment (private & public)	FDI flows	Debt (international borrowings)	Bilateral ODA	Multilateral ODA	Total	Total GFCF (USD billions)
Africa	1.80	99.72	0.28	0.00	0.00	0.00	100.0	8
Developing Asia	26.01	98.46	1.54	0.00	0.00	0.00	100.0	114
Latin America	4.14	98.76	0.97	0.28	0.00	0.00	100.0	18
Middle East	0.42	49.79	3.87	46.34	0.00	0.00	100.0	2
OECD Europe	14.36	87.43	3.25	9.32	0.00	0.00	100.0	63
OECD North America	36.94	99.09	0.17	0.74	0.00	0.00	100.0	162
OECD Pacific	15.16	97.95	0.93	1.12	0.00	0.00	100.0	66
Other Europe	0.02	100.00	0.00	0.00	0.00	0.00	100.0	0
Transition Economies	1.14	97.35	2.65	0.00	0.00	0.00	100.0	5
World Total	100.00	96.85	1.16	1.99	0.00	0.00	100.0	438
Al Parties	51.31	95.56	1.28	3.16	0.00	0.00	100.0	225
NAI Parties	47.71	98.93	0.75	0.33	0.00	0.00	100.0	209
Least Developed								
Countries	0.88	98.80	1.20	0.00	0.00	0.00	100.0	4

Table 35.7 Transport, storage and communications

Region	World GFCF	Domestic investment (private & public)	FDI flows	Debt (international borrowings)	Bilateral ODA	Multilateral ODA	Total	Total GFCF (USD billions)
Africa	166	85.87	3.80	3 71	3.26	3.07	100.0	15
Developing Asia	15.06	90.10	2.43	3.43	2.06	1.98	100.0	134
Latin America	6.05	51.24	40.71	6.13	1.63	0.29	100.0	54
Middle East	2.57	98.59	0.50	0.57	0.18	0.16	100.0	23
OECD Europe	25.96	0.00	48.25	51.73	0.02	0.00	100.0	231
OECD North America	29.04	89.64	3.49	6.77	0.00	0.10	100.0	258
OECD Pacific	17.84	97.23	0.47	2.30	0.00	0.00	100.0	159
Other Europe	0.03	-140.42	0.00	240.42	0.00	0.00	100.0	0
Transition Economies	1.79	87.16	11.25	0.00	1.30	0.28	100.0	16
World Total	100.00	65.53	16.73	16.83	0.50	0.41	100.0	889
Al Parties	70.94	77.53	0.26	22.20	0.01	0.01	100.0	630
NAI Parties	27.95	86.43	8.85	1.54	1.74	1.44	100.0	248
Least Developed								
Countries	0.54	68.21	9.10	0.00	11.90	10.80	100.0	5

Source: Estimations by UNFCCC secretariat based on data from: UNSTAT, National Accounts Database; BIS, 2007; World Bank, 2006, World Development Indicator; OECD, CRS. Abbreviations: AI Parties = Parties included in Annex I to the Convention, FDI = Foreign direct investment, NAI Parties = Parties not included in Annex I to the Convention, ODA = Official Development Assistance, OECD = Organisation for Economic Co-operation and Development.

Table 35.8 Financial intermediation; real estate, renting and business activities

Region	World GFCF	Domestic investment (private & public)	FDI flows	Debt (international borrowings)	Bilateral ODA	Multilateral ODA	Total	Total GFCF (USD billions)
Africa	0.72	96.62	0.85	2.53	0.00	0.00	100.0	19
Developing Asia	3.56	31.50	67.16	1.34	0.00	0.00	100.0	93
Latin America	2.51	-28.55	19.17	109.37	0.00	0.00	100.0	66
Middle East	1.30	85.15	2.48	12.37	0.00	0.00	100.0	34
OECD Europe	29.98	-11.45	51.51	59.94	0.00	0.00	100.0	783
OECD North America	30.95	50.62	17.55	31.84	0.00	0.00	100.0	808
OECD Pacific	30.12	95.55	0.15	4.30	0.00	0.00	100.0	786
Other Europe	0.02	-4,011.66	0.00	4,111.66	0.00	0.00	100.0	0
Transition Economies	0.85	87.48	11.55	0.97	0.00	0.00	100.0	22
World Total	100.00	43.27	23.92	32.81	0.00	0.00	100.0	2,611
Al Parties	90.05	44.90	23.01	32.10	0.00	0.00	100.0	2,351
NAI Parties	8.88	83.16	12.03	4.81	0.00	0.00	100.0	232
Least Developed								
Countries	0.26	98.85	1.15	0.00	0.00	0.00	100.0	7

Table 35.9 Public administration and defence; compulsory social security

Region	World GFCF	Domestic investment (private & public)	FDI flows	Debt (international borrowings)	Bilateral ODA	Multilateral ODA	Total	Total GFCF (USD billions)
Africa	3.71	94.08	3.89	5.92	3.26	3.27	100.0	23
Developing Asia	9.91	94.51	2.43	5.49	2.06	1.98	100.0	62
Latin America	4.42	4.95	40.71	95.05	1.63	0.29	100.0	28
Middle East	2.30	100.00	0.50	0.00	0.18	0.16	100.0	14
OECD Europe	22.61	70.39	48.25	29.61	0.02	0.00	100.0	141
OECD North America	36.47	96.44	3.49	3.56	0.00	0.10	100.0	227
OECD Pacific	19.23	99.76	0.47	0.24	0.00	0.00	100.0	120
Other Europe	0.03	100.00	0.00	0.00	0.00	0.00	100.0	0
Transition Economies	1.32	-9.85	11.25	109.85	1.30	0.28	100.0	8
World Total	100.00	85.55	16.73	14.45	0.50	0.41	100.0	622
Al Parties	75.45	88.70	0.26	11.30	0.01	0.01	100.0	470
NAI Parties	23.37	73.39	8.85	26.61	1.74	1.44	100.0	145
Least Developing								
Countries	0.97	100.00	9.10	0.00	11.90	10.80	100.0	6

Source: Estimations by UNFCCC secretariat based on data from: UNSTAT, National Accounts Database; BIS, 2007; World Bank, 2006, World Development Indicator; OECD, CRS. Abbreviations: Al Parties = Parties included in Annex I to the Convention, FDI = Foreign direct investment, NAI Parties = Parties not included in Annex I to the Convention, ODA = Official Development Assistance, OECD = Organisation for Economic Co-operation and Development.

Table 35.10 Education; health and social work; other community, social and personal services

Region	World GFCF	Domestic investment (private & public)	FDI flows	Debt (international borrowings)	Bilateral ODA	Multilateral ODA	Total	Total GFCF (USD billions)
-								
Africa	0.72	91.47	4.71	0.00	2.66	1.17	100.0	5
Developing Asia	5.45	76.30	21.50	0.00	2.13	0.07	100.0	38
Latin America	3.52	62.35	36.56	0.46	0.62	0.01	100.0	25
Middle East	2.02	91.71	8.22	0.00	0.07	0.00	100.0	14
OECD Europe	28.28	73.08	26.51	0.38	0.02	0.01	100.0	197
OECD North America	37.64	80.50	18.41	1.09	0.00	0.00	100.0	262
OECD Pacific	21.10	99.27	0.43	0.30	0.00	0.00	100.0	147
Other Europe	0.02	98.93	0.00	0.00	1.07	0.00	100.0	0
Transition Economies	1.24	89.68	9.56	0.00	0.76	0.00	100.0	9
World Total	100.00	81.92	17.30	0.60	0.17	0.01	100.0	696
Al Parties	85.56	82.32	16.99	0.67	0.01	0.01	100.0	595
NAI Parties	13.57	79.80	18.88	0.03	1.20	0.09	100.0	94
Least Developed								
Countries	0.29	88.26	4.02	0.00	4.93	2.79	100.0	2

Table 35.11 All Sectors

Region	World GFCF	Domestic investment (private & public)	FDI flows	Debt (international borrowings)	Bilateral ODA	Multilateral ODA	Total	Total GFCF (USD billions)
Africa	1.52	91.92	3.30	2.47	1.41	0.91	100.0	118
Developing Asia	10.37	80.15	16.87	1.64	0.80	0.54	100.0	804
Latin America	4.28	44.70	20.81	33.75	0.59	0.14	100.0	332
Middle East	1.80	91.88	4.18	3.70	0.19	0.05	100.0	140
OECD Europe	26.67	29.73	33.83	36.43	0.00	0.00	100.0	2,067
OECD North America	32.10	66.95	17.95	15.08	0.01	0.01	100.0	2,488
OECD Pacific	21.87	96.51	0.87	2.63	0.00	0.00	100.0	1,695
Other Europe	0.02	-1,109.24	0.00	1,209.16	0.08	0.00	100.0	2
Transition Economies	1.37	79.98	10.70	8.70	0.47	0.15	100.0	106
World Total	100.00	64.65	17.88	17.24	0.14	0.08	100.0	7,750
Al Parties	77.59	68.07	12.51	19.41	0.00	0.00	100.0	6,014
NAI Parties	21.34	85.04	10.17	3.76	0.65	0.38	100.0	1,654
Least Developed								
Countries	0.51	88.22	4.13	1.30	3.22	3.13	100.0	40

CATEGORIES CONSIDERED TO COMPILE/ANALYZE ODA CAPITAL INVESTMENT DATA FROM OECD CREDITOR REPORTING SYSTEM DATABASE

AGRICULTURE, HUNTING, FORESTRY, FISHING

Agricultural land resources, Agricultural water resources, Forestry development, Fishery development

MINING AND QUARRYING

Mineral prospection and exploration, Coal,Oil and gas, Ferrous metals, Non-ferrous metals, Precious metals/ materials, Industrial minerals, Off-shore minerals

MANUFACTURING

Cottage industries & handicraft, Agro-industries, Forest industries, Textiles - leather & substitutes, Chemicals, Fertilizer plants, Cement/lime/plaster, Energy manufacturing, Pharmaceutical production, Basic metal industries, Non-ferrous metal industries, Engineering, Transport equipment industry

ELECTRICITY, GAS AND WATER SUPPLY

Water supply & sanitation - large systems, Basic drinking water supply and basic sanitation, River development, Waste management/disposal, Power generation/nonrenewable sources, Power generation/renewable sources, Electrical transmission/distribution, Gas distribution, Oil-fired power plants, Gas-fired power plants, Coal-fired power plants, Nuclear power plants, Hydro-electric power plants, Geothermal energy, Solar energy, Wind power, Ocean power, Biomass

WHOLESALE RETAIL TRADE, REPAIR OF MOTOR VEHICLES, MOTORCYCLES, ETC.; HOTELS AND RESTAURANTS

– NA

CONSTRUCTION

– NA

TRANSPORT, STORAGE AND COMMUNICATIONS

Road transport, Rail transport, Water transport, Air transport, Storage, Telecommunications, Radio/television/ print media, Information and communication technology

FINANCIAL INTERMEDIATION; REAL ESTATE, RENTING AND BUSINESS ACTIVITIES

– NA

PUBLIC ADMINISTRATION AND DEFENSE; COMPULSORY SOCIAL SECURITY

- NA

EDUCATION, HEALTH AND SOCIAL WORK, OTHER COMMUNITY, SOCIAL AND PERSONAL SERVICES

Education facilities and training, Basic health infrastructure, Low-cost housing, Biosphere protection, Bio-diversity, Site preservation, Flood prevention/control

Figure 1. Subsidies in Gasoline by countries, November 2006 (United States Cents/litre)



🧼 World crude oil price below 38 US cents per litre 🛛 📁 Normal sales price below 53 US cents per litre 🛛 💶 US retail price below 63 US cents per litre

Source: GTZ, 2007.

Subsidies in Diesel by countries, November 2006 Figure 2.



🔲 World crude oil price below 38 US cents per litre 🛛 🛑 Normal sales price below 59 US cents per litre 🛛 💶 US retail price below 69 US cents per litre

Source: GTZ, 2007.

Figure 3. Non-technical loss as percentage of total electricity supply



Source: IEA, 2007; ENERDATA, 2007; Smith, 2004.

Figure 4.

Revenue loss due to non-technical loss of electricity



Source: IEA, 2007; ENERDATA, 2007; Smith, 2004.

ANNEX V SUPPLEMENTARY TABLES AND FIGURES

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