INVENTAIRE NATIONAL DES EMISSIONS DE GAZ A EFFET DE SERRE

Volume 2

Feuilles de calcul

ANNEXE 1

ENERGIE

MODULE			**ENERGY**					
SUBMODULE			**CO_2 FROM ENERGY SOURCES (REFERENCE APPROACH)**					
WORKSHEET			**1-1**					
SHEETS			**1 OF 5**					
COUNTRY			**ALGERIA**					
YEAR			**1994**					
				STEP 1				
				A Production	B Imports	C Exports	D International Bunkers	E Stock Change	F Apparent Consumption
FUEL TYPES									F=(A+B -C-D-E)
Liquid Fossil	Primary Fuels	Crude Oil		35455	319	15469		0	20 305,00
		LPG (wells)		4034,746		3480,508		1	553,24
		Natural Gas Liquids		16007	0	15690		0	317,00
	Secondary Fuels	Gasoline			0	734	0	-3	-731,00
		Jet Kerosene			0	864	0	-4	-860,00
		Other Kerosene			0	0	0	0	0,00
		Shale Oil							0,00
		Gas / Diesel Oil			0	3533	100	44	-3 677,00
		Residual Fuel Oil			0	5060	257	-54	-5 263,00
		LPG			0				0,00
		Ethane			0	0		0	0,00
		Naphtha			0	3009		0	-3 009,00
		Bitumen			0	0		-2	2,00
		Lubricants			3	0	1	-29	31,00
		Petroleum Coke							0,00
		Refinery Feedstocks							0,00
		Other Oil			4	0		0	4,00
Liquid Fossil Totals									
Solid Fossil	Primary Fuels	Anthracite [(a)]							0,00
		Coking Coal		0	761	7		-82	836,00
		Other Bit. Coal							0,00
		Sub-bit. Coal							0,00
		Lignite							0,00
		Oil Shale							0,00
		Peat							0,00
	Secondary Fuels	BKB & Patent Fuel							0,00
		Coke Oven/Gas Coke			0	0		0	0,00
Solid Fuel Totals									
Gaseous Fossil		Natural Gas (Dry)		49191,2868	0	32126,59		0	17 064,70
Total									
Biomass total									
		Solid Biomass		54					54,00
		Liquid Biomass							0,00
		Gas Biomass							0,00

MODULE			**ENERGY**				
SUBMODULE			**CO_2 FROM ENERGY SOURCES (REFERENCE APPROACH)**				
WORKSHEET			**1-1**				
SHEETS			**2 OF 5**				
COUNTRY			**ALGERIA**				
YEAR			**1994**				
			STEP 2		**STEP 3**		
			G [b] Conversion Factor (TJ/Unit)	H Apparent Consumption (TJ)	I Carbon Emission Factor (t C/TJ)	J Carbon Content (t C)	K Carbon Content (Gg C)
FUEL TYPES						H=(FxG)	
Liquid Fossil	Primary Fuels	Crude Oil	43,29	879 003,45	20	17 580 069,00	17 580,07
		LPG (wells)	47,31	26 173,69	17,2	450 187,46	450,19
		Natural Gas Liquids	43,29	13 722,93	17,2	236 034,40	236,03
	Secondary Fuels	Gasoline	44,8	-32 748,80	18,9	-618 952,32	-618,95
		Jet Kerosene	44,59	-38 347,40	19,5	-747 774,30	-747,77
		Other Kerosene		0,00		0,00	0,00
		Shale Oil		0,00		0,00	0,00
		Gas / Diesel Oil	43,33	-159 324,41	20,2	-3 218 353,08	-3 218,35
		Residual Fuel Oil	40,19	-211 519,97	21,1	-4 463 071,37	-4 463,07
		LPG		0,00		0,00	0,00
		Ethane		0,00		0,00	0,00
		Naphtha	45,01	-135 435,09	20	-2 708 701,80	-2 708,70
		Bitumen	40,19	80,38	22	1 768,36	1,77
		Lubricants	40,19	1 245,89	20	24 917,80	24,92
		Petroleum Coke		0,00		0,00	0,00
		Refinery Feedstocks		0,00		0,00	0,00
		Other Oil	40,19	160,76	20	3 215,20	3,22
Liquid Fossil Totals					343 011,43		6 539 339,35
Solid Fossil	Primary Fuels	Anthracite [a]		0,00		0,00	0,00
		Coking Coal	25,75	21 527,00	25,8	555 396,60	555,40
		Other Bit. Coal		0,00		0,00	0,00
		Sub-bit. Coal		0,00		0,00	0,00
		Lignite		0,00		0,00	0,00
		Oil Shale		0,00		0,00	0,00
		Peat		0,00		0,00	0,00
	Secondary Fuels	BKB & Patent Fuel		0,00		0,00	0,00
		Coke Oven/Gas Coke	27,21	0,00		0,00	0,00
Solid Fuel Totals					21 527,00		555 396,60
Gaseous Fossil		Natural Gas (Dry)	49191,2868	39,17	668 424,17	15,3	10 226 889,86
Total				**1 032 962,60**		**17 321 625,81**	**17 321,63**
Biomass total				2 251,10		0,00	0,00
		Solid Biomass	41,687	2 251,10		0,00	0,00
		Liquid Biomass		0,00		0,00	0,00
		Gas Biomass		0,00		0,00	0,00

MODULE			**ENERGY**				
SUBMODULE			**CO_2 FROM ENERGY SOURCES (REFERENCE APPROACH)**				
WORKSHEET			**1-1**				
SHEETS			**3 OF 5**				
COUNTRY			**ALGERIA**				
YEAR			**1994**				
			STEP 4		**STEP 5**		**STEP 6**
			L	M	N	O	P
			Carbon Stored	Net Carbon Emissions	Fraction of Carbon Oxidised	Actual Carbon Emissions	Actual CO_2 Emissions
			(Gg C)	(Gg C)		(Gg C)	(Gg CO_2)
FUEL TYPES				M=(K-L)		O=(MxN)	P=(Ox[44/12])
Liquid Fossil	Primary Fuels	Crude Oil		17 580,07	0,99	17 404,27	63 815,65
		LPG (wells)		450,19	0,99	445,69	1 634,18
		Natural Gas Liquids		236,03	0,99	233,67	856,80
	Secondary Fuels	Gasoline		-618,95	0,99	-612,76	-2 246,80
		Jet Kerosene		-747,77	0,99	-740,30	-2 714,42
		Other Kerosene		0,00		0,00	0,00
		Shale Oil		0,00		0,00	0,00
		Gas / Diesel Oil	0,00	-3 218,35	0,99	-3 186,17	-11 682,62
		Residual Fuel Oil		-4 463,07	0,99	-4 418,44	-16 200,95
		LPG	0,00	0,00	0,99	0,00	0,00
		Ethane	137,23	-137,23		0,00	0,00
		Naphtha	0,00	-2 708,70	0,99	-2 681,61	-9 832,59
		Bitumen	221,93	-220,16	0,99	-217,96	-799,18
		Lubricants	49,43	-24,52	0,99	-24,27	-88,99
		Petroleum Coke		0,00		0,00	0,00
		Refinery Feedstocks		0,00		0,00	0,00
		Other Oil		3,22	0,99	3,18	11,67
Liquid Fossil Totals				408,59	6 130,75		6 205,30
Solid Fossil	Primary Fuels	Anthracite [(a)]		0,00		0,00	0,00
		Coking Coal	0,00	555,40	0,98	544,29	1 995,73
		Other Bit. Coal		0,00		0,00	0,00
		Sub-bit. Coal		0,00		0,00	0,00
		Lignite		0,00		0,00	0,00
		Oil Shale		0,00		0,00	0,00
		Peat		0,00		0,00	0,00
	Secondary Fuels	BKB & Patent Fuel		0,00		0,00	0,00
		Coke Oven/Gas Coke		0,00		0,00	0,00
Solid Fuel Totals				0,00	555,40		544,29
Gaseous Fossil		Natural Gas (Dry)	49191,2868	224,11	10 002,78	0,995	9 952,77
Total			**632,70**	**16 688,93**		**16 702,35**	**61 241,96**
Biomass total			0,00	0,00		0,00	0,00
		Solid Biomass		0,00		0,00	0,00
		Liquid Biomass		0,00		0,00	0,00
		Gas Biomass		0,00		0,00	0,00

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM ENERGY SOURCES (REFERENCE APPROACH)**
WORKSHEET	**1-1**
SHEETS	**4 OF 5 EMISSIONS FROM INTERNATIONAL BUNKERS (INTERNATIONAL MARINE AND AIR TRANSPORT)**
COUNTRY	**ALGERIA**
YEAR	**1994**

		STEP 1	**STEP 2**		**STEP 3**		
		A Quantities Delivered[(a)]	B Conversion Factor (TJ/Unit)	C Quantities Delivered (TJ)	D Carbon Emission Factor (t C/TJ)	E Carbon Content (t C)	F Carbon Content (Gg C)
FUEL TYPES				C=(AxB)		E=(CxD)	F=(E/1000)
olid Fossil	Other Bituminous Coal	0,00	0,00	0,00	0,00	0,00	0,00
	Sub-Bituminous Coal	0,00	0,00	0,00	0,00	0,00	0,00
quid Fossil	Gasoline	0,00	44,80	0,00	18,90	0,00	0,00
	Jet Kerosene	0,00	44,59	0,00	19,50	0,00	0,00
	Gas / Diesel Oil	100,00	43,33	4 333,00	20,20	87 526,60	87,53
	Residual Fuel Oil	257,00	40,19	10 328,83	21,10	217 938,31	217,94
	Lubricants	1,00	40,19	40,19	20,00	803,80	0,80
			Total	**14 702,02**			

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM ENERGY SOURCES (REFERENCE APPROACH)**
WORKSHEET	**1-1**
SHEETS	**4 OF 5 EMISSIONS FROM INTERNATIONAL BUNKERS (INTERNATIONAL MARINE AND AIR TRANSPORT)**
COUNTRY	**ALGERIA**
YEAR	**1994**

		STEP 1	**STEP 2**		**STEP 3**		
		G Fraction of Carbon Stored	H Carbon Stored (Gg C)	I Net Carbon Emissions (Gg C)	J Fraction of Carbon Oxidised	K Actual Carbon Emissions (Gg C)	L Actual CO_2 Emissions (Gg CO_2)
FUEL TYPES			H=(FxG)	I=(F-H)		K=(IxJ)	L=(Kx[44/12])
Solid Fossil	Other Bituminous Coal		0,00	0,00		0,00	0,00
	Sub-Bituminous Coal		0,00	0,00		0,00	0,00
Liquid Fossil	Gasoline		0,00	0,00		0,00	0,00
	Jet Kerosene		0,00	0,00		0,00	0,00
	Gas / Diesel Oil	0,5	43,76	43,76	0,99	43,33	158,86
	Residual Fuel Oil	0,5	108,97	108,97	0,99	107,88	395,56
	Lubricants	0,5	0,40	0,40	0,99	0,40	1,46
						Total[(a)]	**555,88**

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM ENERGY**
WORKSHEET	**AUXILIARY WORKSHEET 1-1: ESTIMATING CARBON STORED IN PRODUCTS.**
SHEETS	**1 OF 1**
COUNTRY	**ALGERIA**
YEAR	**1994**

	A Estimated Fuel Quantities	B Conversion Factor (TJ/Unit)	C Estimated Fuel Quantities (TJ)	D Carbon Emission Factor (t C/TJ)	E Carbon Content (t C)	F Carbon Content (Gg C)	G Fraction of Carbon Stored	H Carbon Stored (Gg C)
FUEL TYPES			C=(AxB)		E=(CxD)	F=(E/1000)		H=(FxG)
Naphtha [a]	0	45,01	0,00		0,00	0,00	0,8	0,00
Lubricants	123	40,19	4 943,37	20	98 867,40	98,87	0,5	49,43
Bitumen	251	40,19	10 087,69	22	221 929,18	221,93	1	221,93
Coal Oils and Tars (from Coking Coal)			0,00		0,00	0,00	0,75	0,00
Natural Gas [a]	1140,63	39,17	44 678,48	15,2	679 112,85	679,11	0,33	224,11
Gas/Diesel Oil [a]		43,33	0,00		0,00	0,00	0,5	0,00
LPG [a]		47,31	0,00		0,00	0,00	0,8	0,00
Ethane [a]	215	47,49	10 210,35	16,8	171 533,88	171,53	0,8	137,23
Other Fuels [b]			0,00		0,00	0,00		0,00
			0,00		0,00	0,00		0,00
			0,00		0,00	0,00		0,00

DULE	**ENERGY**
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-2 STEP BY STEP CALCULATIONS**
SHEETS	**1 OF 16 ENERGY INDUSTRIES**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 1	STEP 2		STEP 3		
ENERGY INDUSTRIES	A Consumption	B Conversion Factor (TJ/Unit)	C Consumption (TJ)	D Carbon Emission Factor (t C/TJ)	E Carbon Content (t C)	F Carbon Content (Gg C)
			C=(AxB)		E=(CxD)	F=(E/1000)
Crude Oil [(a)]	405	43,29	17 532,45	20	350 649,00	350,65
Natural Gas Liquids			0,00		0,00	0,00
Gasoline			0,00		0,00	0,00
Jet Kerosene			0,00		0,00	0,00
Other Kerosene			0,00		0,00	0,00
Gas/Diesel Oil	221	43,33	9 575,93	20,2	193 433,79	193,43
Residual Fuel Oil			0,00		0,00	0,00
LPG			0,00		0,00	0,00
Ethane			0,00		0,00	0,00
Naphtha			0,00		0,00	0,00
Lubricants			0,00		0,00	0,00
Petroleum Coke			0,00		0,00	0,00
Refinery Gas			0,00		0,00	0,00
Anthracite			0,00		0,00	0,00
Coking Coal			0,00		0,00	0,00
Other Bituminous Coal			0,00		0,00	0,00
Sub-Bituminous Coal			0,00		0,00	0,00
Lignite			0,00		0,00	0,00
Peat			0,00		0,00	0,00
Patent Fuel			0,00		0,00	0,00
Brown Coal Briquettes			0,00		0,00	0,00
Coke Oven Coke			0,00		0,00	0,00
Gas Coke			0,00		0,00	0,00
Gas Works Gas			0,00		0,00	0,00
Coke Oven Gas			0,00		0,00	0,00
Blast Furnace Gas			0,00		0,00	0,00
Natural gas	11571,7692	39,17	453 266,20	15,2	6 889 646,23	6 889,65
Municipal Solid Waste			0,00		0,00	0,00
Industrial Waste			0,00		0,00	0,00
			0,00		0,00	0,00
			0,00		0,00	0,00
		Total	**480 374,58**			
Memo items:						
Wood/Wood Waste			0,00		0,00	0,00
Charcoal			0,00		0,00	0,00
Other Solid Biomass			0,00		0,00	0,00
Liquid Biomass			0,00		0,00	0,00
Gaseous Biomass			0,00		0,00	0,00
		Total Biomass	**0,00**			

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-2 STEP BY STEP CALCULATIONS**
SHEETS	**2 OF 16 ENERGY INDUSTRIES**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 4			STEP 5		STEP 6
ENERGY INDUSTRIES	G Fraction of Carbon Stored	H Carbon Stored (Gg C)	I Net Carbon Emissions (Gg C)	J Fraction of Carbon Oxidised	K Actual Carbon Emissions (Gg C)	L Actual CO_2 Emissions (Gg CO_2)
		H=(FxG)	I=(F-H)		K=(IxJ)	L=(Kx[44/12])
Crude Oil [(a)]		0,00	350,65	0,99	347,14	1 272,86
Natural Gas Liquids		0,00	0,00		0,00	0,00
Gasoline		0,00	0,00		0,00	0,00
Jet Kerosene		0,00	0,00		0,00	0,00
Other Kerosene		0,00	0,00		0,00	0,00
Gas/Diesel Oil		0,00	193,43	0,99	191,50	702,16
Residual Fuel Oil		0,00	0,00		0,00	0,00
LPG		0,00	0,00		0,00	0,00
Ethane		0,00	0,00		0,00	0,00
Naphtha		0,00	0,00		0,00	0,00
Lubricants		0,00	0,00		0,00	0,00
Petroleum Coke		0,00	0,00		0,00	0,00
Refinery Gas		0,00	0,00		0,00	0,00
Anthracite		0,00	0,00		0,00	0,00
Coking Coal		0,00	0,00		0,00	0,00
Other Bituminous Coal		0,00	0,00		0,00	0,00
Sub-Bituminous Coal		0,00	0,00		0,00	0,00
Lignite		0,00	0,00		0,00	0,00
Peat		0,00	0,00		0,00	0,00
Patent Fuel		0,00	0,00		0,00	0,00
Brown Coal Briquettes		0,00	0,00		0,00	0,00
Coke Oven Coke		0,00	0,00		0,00	0,00
Gas Coke		0,00	0,00		0,00	0,00
Gas Works Gas		0,00	0,00		0,00	0,00
Coke Oven Gas		0,00	0,00		0,00	0,00
Blast Furnace Gas		0,00	0,00		0,00	0,00
Natural gas		0,00	6 889,65	1	6 889,65	25 262,04
Municipal Solid Waste		0,00	0,00		0,00	0,00
Industrial Waste		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
					Total	**27 237,06**
Memo items:						
Wood/Wood Waste		0,00	0,00		0,00	0,00
Charcoal		0,00	0,00		0,00	0,00
Other Solid Biomass		0,00	0,00		0,00	0,00
Liquid Biomass		0,00	0,00		0,00	0,00
Gaseous Biomass		0,00	0,00		0,00	0,00
					Total Biomass	**0,00**

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-2 STEP BY STEP CALCULATIONS**
SHEETS	**3 OF 16 MANUFACTURING INDUSTRIES AND CONSTRUCTION**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 1	**STEP 2**		**STEP 3**		
MANUFACTURING INDUSTRIES AND CONSTRUCTION	A Consumption	B Conversion Factor (TJ/Unit)	C Consumption (TJ)	D Carbon Emission Factor (t C/TJ)	E Carbon Content (t C)	F Carbon Content (Gg C)
			C=(AxB)		E=(CxD)	F=(E/1000)
Crude Oil [(a)]	29	43,29	1 255,41	20	25 108,20	25,11
Natural Gas Liquids			0,00		0,00	0,00
Gasoline			0,00		0,00	0,00
Jet Kerosene			0,00		0,00	0,00
Other Kerosene			0,00		0,00	0,00
Gas/Diesel Oil	386	43,33	16 725,38	20,2	337 852,68	337,85
Residual Fuel Oil	36	40,19	1 446,84	21,1	30 528,32	30,53
LPG	23,73	47,31	1 122,67	17,2	19 309,86	19,31
Ethane			0,00		0,00	0,00
Naphtha			0,00		0,00	0,00
Lubricants			0,00		0,00	0,00
Petroleum Coke			0,00		0,00	0,00
Refinery Gas			0,00		0,00	0,00
Anthracite			0,00		0,00	0,00
Coking Coal	240	41,868	10 048,32	25,8	259 246,66	259,25
Other Bituminous Coal			0,00		0,00	0,00
Sub-Bituminous Coal			0,00		0,00	0,00
Lignite			0,00		0,00	0,00
Peat			0,00		0,00	0,00
Patent Fuel			0,00		0,00	0,00
Brown Coal Briquettes			0,00		0,00	0,00
Coke Oven Coke			0,00		0,00	0,00
Gas Coke			0,00		0,00	0,00
Gas Works Gas			0,00		0,00	0,00
Coke Oven Gas	12	41,868	502,42	13	6 531,41	6,53
Blast Furnace Gas	47	41,868	1 967,80	66	129 874,54	129,87
Natural gas	1450	39,17	56 796,50	15,2	863 306,80	863,31
Municipal Solid Waste			0,00		0,00	0,00
Industrial Waste			0,00		0,00	0,00
			0,00		0,00	0,00
			0,00		0,00	0,00
		Total	**89 865,33**			
Memo items:						
Wood/Wood Waste			0,00		0,00	0,00
Charcoal			0,00		0,00	0,00
Other Solid Biomass			0,00		0,00	0,00
Liquid Biomass			0,00		0,00	0,00
Gaseous Biomass			0,00		0,00	0,00
		Total Biomass	**0,00**			

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-2 STEP BY STEP CALCULATIONS**
SHEETS	**4 OF 16 MANUFACTURING INDUSTRIES AND CONSTRUCTION**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 4			**STEP 5**		**STEP 6**
MANUFACTURING INDUSTRIES AND CONSTRUCTION	G Fraction of Carbon Stored[(a)]	H Carbon Stored (Gg C)[(a)]	I Net Carbon Emissions I	J Fraction of Carbon Oxidised J	K Actual Carbon Emissions K	L Actual CO_2 Emissions L
			(Gg C)		(Gg C)	(Gg CO_2)
Crude Oil [(a)]		0,00	25,11	0,99	24,86	91,14
Natural Gas Liquids		0,00	0,00		0,00	0,00
Gasoline		0,00	0,00		0,00	0,00
Jet Kerosene		0,00	0,00		0,00	0,00
Other Kerosene		0,00	0,00		0,00	0,00
Gas/Diesel Oil		0,00	337,85	0,99	334,47	1 226,41
Residual Fuel Oil		0,00	30,53	0,99	30,22	110,82
LPG		0,00	19,31	0,99	19,12	70,09
Ethane		0,00	0,00		0,00	0,00
Naphtha		0,00	0,00		0,00	0,00
Lubricants		0,00	0,00		0,00	0,00
Petroleum Coke		0,00	0,00		0,00	0,00
Refinery Gas		0,00	0,00		0,00	0,00
Anthracite		0,00	0,00		0,00	0,00
Coking Coal		0,00	259,25	0,98	254,06	931,56
Other Bituminous Coal		0,00	0,00		0,00	0,00
Sub-Bituminous Coal		0,00	0,00		0,00	0,00
Lignite		0,00	0,00		0,00	0,00
Peat		0,00	0,00		0,00	0,00
Patent Fuel		0,00	0,00		0,00	0,00
Brown Coal Briquettes		0,00	0,00		0,00	0,00
Coke Oven Coke		0,00	0,00		0,00	0,00
Gas Coke		0,00	0,00		0,00	0,00
Gas Works Gas		0,00	0,00		0,00	0,00
Coke Oven Gas		0,00	6,53	0,995	6,50	23,83
Blast Furnace Gas		0,00	129,87	0,995	129,23	473,83
Natural gas		0,00	863,31	0,995	858,99	3 149,63
Municipal Solid Waste		0,00	0,00		0,00	0,00
Industrial Waste		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
					Total	**6 077,31**
Memo items:						
Wood/Wood Waste		0,00	0,00		0,00	0,00
Charcoal		0,00	0,00		0,00	0,00
Other Solid Biomass		0,00	0,00		0,00	0,00
Liquid Biomass		0,00	0,00		0,00	0,00
Gaseous Biomass		0,00	0,00		0,00	0,00
					Total Biomass	**0,00**

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**AUXILIARY WORKSHEET 1-2: ESTIMATING CARBON STORED IN PRODUCTS**
SHEETS	**1 OF 1**
COUNTRY	**ALGERIA**
YEAR	**1994**

	A Feedstock Use	B Conversion Factor (TJ/Unit)	C Feedstock Use (TJ)	D Carbon Emission Factor (t C/TJ)	E Carbon Content (t C)	F Carbon Content (Gg C)	G Fraction of Carbon Stored	H Carbon Stored (Gg C)
FUEL TYPES			C=(AxB)		E=(CxD)	F=(E/1000)		H=(FxG)
Gas/Diesel Oil	44	43,33	1 906,52	20,2	38 511,70	38,51	0,5	19,26
LPG	-5,084	47,31	-240,52	17,2	-4 137,01	-4,14	0,8	-3,31
Ethane	0		0,00		0,00	0,00	0,8	0,00
Naphtha	0		0,00		0,00	0,00	0,8	0,00
Natural Gas	0		0,00		0,00	0,00	0,33	0,00
Crude oil	15	43,29	649,35	20	12 987,00	12,99	0,75	9,74
Residual Fuel Oil	-54	40,19	-2 170,26	21,1	-45 792,49	-45,79	0,5	-22,90
Gasoline	-3	44,8	-134,40	18,9	-2 540,16	-2,54	0,5	-1,27
Jet Kerozene	-4	44,59	-178,36	19,5	-3 478,02	-3,48	0,5	-1,74
Lubricants	-29	40,19	-1 165,51	20	-23 310,20	-23,31	0,5	-11,66
Bitumes	-2	40,19	-80,38	22	-1 768,36	-1,77	1	-1,77
Coking coke	-1	31	-31,00	25,8	-799,80	-0,80	0,75	-0,60

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-2 STEP BY STEP CALCULATIONS**
SHEETS	**5 OF 16 TRANSPORT**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 1	**STEP 2**		**STEP 3**		
TRANSPORT	A Consumption	B Conversion Factor (TJ/Unit)	C Consumption (TJ)	D Carbon Emission Factor (t C/TJ)	E Carbon Content (t C)	F Carbon Content (Gg C)
			C=(AxB)		E=(CxD)	F=(E/1000)
Domestic Aviation [(a)]						
Gasoline			0,00		0,00	0,00
Jet Kerosene	287,33	44,59	12 812,04	19,5	249 834,87	249,83
			0,00		0,00	0,00
		Subtotal	**12 812,04**			
Road Transport						
Natural Gas			0,00		0,00	0,00
LPG	33,9	47,31	1 603,81	17,2	27 585,51	27,59
Gasoline	2270,56	44,8	101 721,09	18,9	1 922 528,56	1 922,53
Gas/Diesel Oil	994,11	43,33	43 074,79	20,2	870 110,68	870,11
			0,00		0,00	0,00
		Subtotal	**146 399,68**			
Rail Transport						
Gas/Diesel Oil	67,54	43,33	2 926,51	20,2	59 115,47	59,12
Residual Fuel Oil			0,00		0,00	0,00
Anthracite			0,00		0,00	0,00
Other Bituminous Coal			0,00		0,00	0,00
Coke Oven Coke			0,00		0,00	0,00
			0,00		0,00	0,00
		Subtotal	**2 926,51**			
National Navigation [(a)]						
Gasoline	0	44,8	0,00		0,00	0,00
Gas/Diesel Oil	206,28	43,33	8 938,11	20,2	180 549,87	180,55
Residual Fuel Oil	54,9	40,19	2 206,43	21,1	46 555,69	46,56
Lubricants	191,35	40,19	7 690,36	20	153 807,13	153,81
Sub-Bituminous Coal			0,00		0,00	0,00
			0,00		0,00	0,00
		Subtotal	**18 834,90**			
Pipeline Transport						
Natural Gas	534,72	39,17	20 944,98	15,3	320 458,23	320,46
			0,00		0,00	0,00
			0,00		0,00	0,00
		Subtotal	**20 944,98**			
		Total Transport [(a)]	**201 918,12**			
Memo items:						
Liquid Biomass			0,00		0,00	0,00
			0,00		0,00	0,00
		Total Biomass	**0,00**			

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-2 STEP BY STEP CALCULATIONS**
SHEETS	**6 OF 16 TRANSPORT**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 4			STEP 5		STEP 6
TRANSPORT	G Fraction of Carbon Stored	H Carbon Stored (Gg C)	I Net Carbon Emissions (Gg C)	J Fraction of Carbon Oxidised	K Actual Carbon Emissions (Gg C)	L Actual CO_2 Emissions (Gg CO_2)
		H=(FxG)	I=(F-H)		K=(IxJ)	L=(Kx[44/12])
Domestic Aviation [a]						
Gasoline		0,00	0,00		0,00	0,00
Jet Kerosene		0,00	249,83	0,99	247,34	906,90
		0,00	0,00		0,00	0,00
					Subtotal	**906,90**
Road Transport						
Natural Gas		0,00	0,00		0,00	0,00
LPG		0,00	27,59	0,99	27,31	100,14
Gasoline		0,00	1 922,53	0,99	1 903,30	6 978,78
Gas/Diesel Oil		0,00	870,11	0,99	861,41	3 158,50
		0,00	0,00		0,00	0,00
					Subtotal	**10 237,42**
Rail Transport						
Gas/Diesel Oil		0,00	59,12	0,99	58,52	214,59
Residual Fuel Oil		0,00	0,00		0,00	0,00
Anthracite		0,00	0,00		0,00	0,00
Other Bituminous Coal		0,00	0,00		0,00	0,00
Coke Oven Coke		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
					Subtotal	**214,59**
National Navigation [a]						
Gasoline		0,00	0,00		0,00	0,00
Gas/Diesel Oil		0,00	180,55	0,99	178,74	655,40
Residual Fuel Oil		0,00	46,56	0,99	46,09	169,00
Lubricants		0,00	153,81	0,99	152,27	558,32
Sub-Bituminous Coal		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
					Subtotal	**1 382,71**
Pipeline Transport						
Natural Gas		0,00	320,46	0,995	318,86	1 169,14
		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
					Subtotal	**1 169,14**
					Total Transport [a]	**13 910,76**
Memo items:						
Liquid Biomass		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
					Total Biomass	**0,00**

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-2 STEP BY STEP CALCULATIONS**
SHEETS	**7 OF 16 MEMO ITEMS: INTERNATIONAL BUNKERS**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 1	**STEP 2**		**STEP 3**		
MEMO ITEMS: INTERNATIONAL BUNKERS	A Consumption	B Conversion Factor (TJ/Unit)	C Consumption (TJ)	D Carbon Emission Factor (t C/TJ)	E Carbon Content (t C)	F Carbon Content (Gg C)
			C=(AxB)		E=(CxD)	F=(E/1000)
Intl. Marine Bunkers						
Gasoline	0		0,00		0,00	0,00
Gas/Diesel Oil	98,02	43,33	4 247,21	20,2	85 793,57	85,79
Residual Fuel Oil	26,1	40,19	1 048,96	21,1	22 133,03	22,13
Lubricants			0,00		0,00	0,00
Sub-Bituminous Coal			0,00		0,00	0,00
			0,00		0,00	0,00
		Total	**5 296,17**			
Intl. Aviation Bunkers						
Gasoline			0,00		0,00	0,00
Jet Kerosene	24,79	44,59	1 105,39	19,5	21 555,03	21,56
			0,00		0,00	0,00
		Total	**1 105,39**			

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-2 STEP BY STEP CALCULATIONS**
SHEETS	**8 OF 16 MEMO ITEMS: INTERNATIONAL BUNKERS**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 1	**STEP 2**		**STEP 3**		
MEMO ITEMS: INTERNATIONAL BUNKERS	G Fraction of Carbon Stored	H Carbon Stored (Gg C)	I Net Carbon Emissions (Gg C)	J Fraction of Carbon Oxidised	K Actual Carbon Emissions (Gg C)	L Actual CO_2 Emissions (Gg CO_2)
		H=(FxG)	I=(F-H)		K=(IxJ)	L=(Kx[44/12])
Intl. Marine Bunkers						
Gasoline		0,00	0,00		0,00	0,00
Gas/Diesel Oil		0,00	85,79	0,99	84,94	311,43
Residual Fuel Oil		0,00	22,13	0,99	21,91	80,34
Lubricants		0,00	0,00		0,00	0,00
Sub-Bituminous Coal		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
					Total	**391,77**
Intl. Aviation Bunkers						
Gasoline		0,00	0,00		0,00	0,00
Jet Kerosene		0,00	21,56	0,99	21,34	78,24
		0,00	0,00		0,00	0,00
					Total	**78,24**

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-2 STEP BY STEP CALCULATIONS**
SHEETS	**11 OF 16 RESIDENTIAL SECTOR**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 1	**STEP 2**		**STEP 3**		
RESIDENTIAL SECTOR	A Consumption	B Conversion Factor (TJ/Unit)	C Consumption (TJ)	D Carbon Emission Factor (t C/TJ)	E Carbon Content (t C)	F Carbon Content (Gg C)
			C=(AxB)		E=(CxD)	F=(E/1000)
Gasoline			0,00		0,00	0,00
Other Kerosene			0,00		0,00	0,00
Gas/Diesel Oil	1189	43,33	51 519,37	20,2	1 040 691,27	1 040,69
Residual Fuel Oil			0,00		0,00	0,00
LPG	1375,43	47,31	65 071,59	17,2	1 119 231,40	1 119,23
Anthracite			0,00		0,00	0,00
Other Bituminous Coal			0,00		0,00	0,00
Sub-Bituminous Coal			0,00		0,00	0,00
Lignite			0,00		0,00	0,00
Peat			0,00		0,00	0,00
Patent Fuel			0,00		0,00	0,00
Brown Coal Briquettes			0,00		0,00	0,00
Coke Oven Coke			0,00		0,00	0,00
Gas Works Gas			0,00		0,00	0,00
Coke Oven Gas			0,00		0,00	0,00
Natural gas	1924,4	39,17	75 378,75	15,2	1 145 756,97	1 145,76
			0,00		0,00	0,00
			0,00		0,00	0,00
			0,00		0,00	0,00
			0,00		0,00	0,00
		Total	**191 969,71**			
Memo items:						
Wood/Wood Waste	54	41,868	2 260,87	34,121	77 143,21	77,14
Charcoal			0,00		0,00	0,00
Other Solid Biomass			0,00		0,00	0,00
Liquid Biomass			0,00		0,00	0,00
Gaseous Biomass			0,00		0,00	0,00
		Total Biomass	**2 260,87**			

MODULE	**ENERGY**
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-2 STEP BY STEP CALCULATIONS**
SHEETS	**11 OF 16 RESIDENTIAL SECTOR**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 4			**STEP 5**		**STEP 6**
RESIDENTIAL SECTOR	G Fraction of Carbon Stored	H Carbon Stored (Gg C)	I Net Carbon Emissions (Gg C)	J Fraction of Carbon Oxidised	K Actual Carbon Emissions (Gg C)	L Actual CO_2 Emissions (Gg CO_2)
		H=(FxG)	I=(F-H)		K=(IxJ)	L=(Kx[44/12])
Gasoline		0,00	0,00		0,00	0,00
Other Kerosene		0,00	0,00		0,00	0,00
Gas/Diesel Oil		0,00	1 040,69	0,99	1 030,28	3 777,71
Residual Fuel Oil		0,00	0,00		0,00	0,00
LPG		0,00	1 119,23	0,99	1 108,04	4 062,81
Anthracite		0,00	0,00		0,00	0,00
Other Bituminous Coal		0,00	0,00		0,00	0,00
Sub-Bituminous Coal		0,00	0,00		0,00	0,00
Lignite		0,00	0,00		0,00	0,00
Peat		0,00	0,00		0,00	0,00
Patent Fuel		0,00	0,00		0,00	0,00
Brown Coal Briquettes		0,00	0,00		0,00	0,00
Coke Oven Coke		0,00	0,00		0,00	0,00
Gas Works Gas		0,00	0,00		0,00	0,00
Coke Oven Gas		0,00	0,00		0,00	0,00
Natural gas		0,00	1 145,76	0,995	1 140,03	4 180,10
		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
		0,00	0,00		0,00	0,00
					Total	**12 020,62**
Memo items:						
Wood/Wood Waste		0,00	77,14	0,87	67,11	246,09
Charcoal		0,00	0,00		0,00	0,00
Other Solid Biomass		0,00	0,00		0,00	0,00
Liquid Biomass		0,00	0,00		0,00	0,00
Gaseous Biomass		0,00	0,00		0,00	0,00
					Total Biomass	**246,09**

MODULE			**ENERGY**					
SUBMODULE			**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**					
WORKSHEET			**1-2 OVERVIEW**					
SHEET			**1 OF 8**					
COUNTRY			**ALGERIA**					
YEAR			**1994**					
			A Crude Oil	B LPG In wells	C Natural Gas Liquids	D Gasoline	E Jet Kerosene	F Other Kerosene
FUELCONSUMPTION (TJ)								
Energy Industries			17 532,45		0,00	0,00	0,00	0,00
Manufacturing Industries and Construction			1 255,41		0,00	0,00	0,00	0,00
Transport	Domestic Aviation [(a)]					0,00	12 812,04	
	Road					101 721,09		
	Railways							
	National Navigation [(a)]					0,00		
	Pipeline Transport							
Other Sectors	Commercial/Institutional					0,00	0,00	0,00
	Residential					0,00		0,00
	Agriculture / Forestry / Fishing	Stationary				0,00		0,00
		Mobile				0,00	0,00	0,00
Other (not elsewhere specified)			0,00		0,00	0,00	0,00	0,00
Total [(a)]			**18 787,86**	**0,00**	**0,00**	**101 721,09**	**12 812,04**	**0,00**
Memo: International Marine Bunkers						0,00		
Memo: International Aviation Bunkers						0,00	1 105,39	
CO_2 EMISSIONS (Gg)								
Energy Industries			1 272,86		0,00	0,00	0,00	0,00
Manufacturing Industries and Construction			91,14		0,00	0,00	0,00	0,00
Transport	Domestic Aviation [(a)]					0,00	906,90	
	Road					6 978,78		
	Railways							
	National Navigation [(a)]					0,00		
	Pipeline Transport							
Other Sectors	Commercial/Institutional					0,00	0,00	0,00
	Residential					0,00		0,00
	Agriculture / Forestry / Fishing	Stationary				0,00		0,00
		Mobile				0,00	0,00	0,00
Other (not elsewhere specified)			0,00		0,00	0,00	0,00	0,00
Total [(a)]			**1 364,00**	**0,00**	**0,00**	**6 978,78**	**906,90**	**0,00**
Memo: International Marine Bunkers						0,00		
Memo: International Aviation Bunkers						0,00	78,24	

MODULE			**ENERGY**					
SUBMODULE			**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**					
WORKSHEET			**1-2 OVERVIEW**					
SHEET			**2 OF 8**					
COUNTRY			**ALGERIA**					
YEAR			**1994**					
			G Shale Oil	H Gas / Diesel Oil	I Residual Fuel Oil	J LPG	K Ethane	L Naphtha
FUELCONSUMPTION (TJ)								
Energy Industries				9 575,93	0,00	0,00	0,00	0,00
Manufacturing Industries and Construction					16 725,38	1 446,84	1 122,67	0,00
Transport	Domestic Aviation [a]							
	Road			43 074,79		1 603,81		
	Railways			2 926,51	0,00			
	National Navigation [a]			8 938,11	2 206,43			
	Pipeline Transport							
Other Sectors	Commercial/Institutional			0,00	0,00	0,00		
	Residential			51 519,37	0,00	65 071,59		
	Agriculture / Forestry / Fishing	Stationary		0,00	0,00	0,00		
		Mobile		0,00	0,00	0,00		
Other (not elsewhere specified)				0,00	0,00	0,00	0,00	0,00
Total [a]			**0,00**	**132 760,09**	**3 653,27**	**67 798,07**	**0,00**	**0,00**
Memo: International Marine Bunkers				4 247,21	1 048,96			
Memo: International Aviation Bunkers								
CO_2 EMISSIONS (Gg)								
Energy Industries				702,16	0,00	0,00	0,00	0,00
Manufacturing Industries and Construction				1 226,41	110,82	70,09	0,00	0,00
Transport	Domestic Aviation [a]							
	Road			3 158,50		100,14		
	Railways			214,59	0,00			
	National Navigation [a]			655,40	169,00			
	Pipeline Transport							
Other Sectors	Commercial/Institutional			0,00	0,00	0,00		
	Residential			3 777,71	0,00	4 062,81		
	Agriculture / Forestry / Fishing	Stationary		0,00	0,00	0,00		
		Mobile		0,00	0,00	0,00		
Other (not elsewhere specified)				0,00	0,00	0,00	0,00	0,00
Total [a]			**0,00**	**9 734,77**	**279,81**	**4 233,04**	**0,00**	**0,00**
Memo: International Marine Bunkers				311,43	80,34			
Memo: International Aviation Bunkers								

MODULE	**ENERGY**							
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**							
WORKSHEET	**1-2 OVERVIEW**							
SHEET	**3 OF 8**							
COUNTRY	**ALGERIA**							
YEAR	**1994**							
			M	N	O	P	Q	R
			Lubricants	Petroleum Coke	Refinery Gas	Anthracite	Coking Coal	Other Bituminous Coal
FUELCONSUMPTION (TJ)								
Energy Industries			0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing Industries and Construction				0,00	0,00	0,00	10 048,32	0,00
Transport	Domestic Aviation [a]							
	Road							
	Railways					0,00		0,00
	National Navigation [a]		7 690,36					
	Pipeline Transport							
Other Sectors	Commercial/Institutional					0,00		0,00
	Residential					0,00		0,00
	Agriculture / Forestry / Fishing	Stationary				0,00	0,00	0,00
		Mobile						
Other (not elsewhere specified)			0,00	0,00	0,00	0,00	0,00	0,00
Total [a]			**7 690,36**	**0,00**	**0,00**	**0,00**	**10 048,32**	**0,00**
Memo: International Marine Bunkers			0,00					
Memo: International Aviation Bunkers								
CO_2 EMISSIONS (Gg)								
Energy Industries			0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing Industries and Construction			0,00	0,00	0,00	0,00	931,56	0,00
Transport	Domestic Aviation [a]							
	Road							
	Railways					0,00		0,00
	National Navigation [a]		558,32					
	Pipeline Transport							
Other Sectors	Commercial/Institutional					0,00		0,00
	Residential					0,00		0,00
	Agriculture / Forestry / Fishing	Stationary				0,00	0,00	0,00
		Mobile						
Other (not elsewhere specified)			0,00	0,00	0,00	0,00	0,00	0,00
Total [a]			**558,32**	**0,00**	**0,00**	**0,00**	**931,56**	**0,00**
Memo: International Marine Bunkers			0,00					
Memo: International Aviation Bunkers								

MODULE			**ENERGY**					
SUBMODULE			**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**					
WORKSHEET			**1-2 OVERVIEW**					
SHEET			**4 OF 8**					
COUNTRY			**ALGERIA**					
YEAR			**1994**					
			S Sub-Bituminous Coal	T Lignite	U Oil Shale	V Peat	W Patent Fuel	X Brown Coal Briquettes
FUELCONSUMPTION (TJ)								
Energy Industries			0,00	0,00		0,00	0,00	0,00
Manufacturing Industries and Construction			0,00	0,00		0,00	0,00	0,00
Transport	Domestic Aviation [a]							
	Road							
	Railways							
	National Navigation [a]		0,00			0,00		
	Pipeline Transport							
Other Sectors	Commercial/Institutional			0,00				0,00
	Residential		0,00	0,00		0,00	0,00	0,00
	Agriculture / Forestry / Fishing	Stationary		0,00			0,00	0,00
		Mobile						
Other (not elsewhere specified)			0,00	0,00	0,00	0,00	0,00	0,00
Total [a]			**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**
Memo: International Marine Bunkers			0,00					
Memo: International Aviation Bunkers								
CO_2 EMISSIONS (Gg)								
Energy Industries			0,00	0,00		0,00	0,00	0,00
Manufacturing Industries and Construction			0,00	0,00		0,00	0,00	0,00
Transport	Domestic Aviation [a]							
	Road							
	Railways							
	National Navigation [a]		0,00					
	Pipeline Transport							
Other Sectors	Commercial/Institutional			0,00				0,00
	Residential		0,00	0,00		0,00	0,00	0,00
	Agriculture / Forestry / Fishing	Stationary		0,00			0,00	0,00
		Mobile						
Other (not elsewhere specified)			0,00	0,00		0,00	0,00	0,00
Total [a]			**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**
Memo: International Marine Bunkers			0,00					
Memo: International Aviation Bunkers								

MODULE			**ENERGY**					
SUBMODULE			**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**					
WORKSHEET			**1-2 OVERVIEW**					
SHEET			**5 OF 8**					
COUNTRY			**ALGERIA**					
YEAR			**1994**					
			Y Coke Oven Coke	Z Gas Coke	AA Works Gas	AB Coke Oven Gas	AC Blast Furnace Gas	AD Natural Gas
FUELCONSUMPTION (TJ)								
Energy Industries			0,00	0,00	0,00	0,00	0,00	453 266,20
Manufacturing Industries and Construction			0,00	0,00	0,00	502,42	1 967,80	56 796,50
Transport	Domestic Aviation [a]							
	Road							0,00
	Railways		0,00					
	National Navigation [a]							
	Pipeline Transport		0,00					20 944,98
Other Sectors	Commercial/Institutional		0,00		0,00	0,00		0,00
	Residential		0,00		0,00	0,00		75 378,75
	Agriculture / Forestry / Fishing	Stationary			0,00			0,00
		Mobile						
Other (not elsewhere specified)			0,00	0,00	0,00	0,00	0,00	0,00
Total [a]			**0,00**	**0,00**	**0,00**	**502,42**	**1 967,80**	**606 386,43**
Memo: International Marine Bunkers								
Memo: International Aviation Bunkers								
CO_2 EMISSIONS (Gg)								
Energy Industries			1 272,86		0,00	0,00	0,00	25 262,04
Manufacturing Industries and Construction			91,14		0,00	23,83	473,83	3 149,63
Transport	Domestic Aviation [a]							
	Road							0,00
	Railways		0,00					
	National Navigation [a]					0,00		
	Pipeline Transport							1 169,14
Other Sectors	Commercial/Institutional		0,00		0,00	0,00		0,00
	Residential		0,00		0,00	0,00		4 180,10
	Agriculture / Forestry / Fishing	Stationary	0,00		0,00			0,00
		Mobile						
Other (not elsewhere specified)			0,00	0,00	0,00	0,00	0,00	0,00
Total [a]			**0,00**	**0,00**	**0,00**	**23,83**	**473,83**	**33 760,91**
Memo: International Marine Bunkers								
Memo: International Aviation Bunkers								

MODULE	**ENERGY**							
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**							
WORKSHEET	**1-2 OVERVIEW**							
SHEET	**6 OF 8**							
COUNTRY	**ALGERIA**							
YEAR	**1994**							
			AE Municipal Solid Waste	AF Industrial Waste	AG [b] (additional fuels)	AH[b]	AI[b]	AJ[b]
FUELCONSUMPTION (TJ)								
Energy Industries			0,00	0,00	0,00	0,00		
Manufacturing Industries and Construction			0,00	0,00	0,00	0,00		
Transport	Domestic Aviation [a]				0,00			
	Road				0,00			
	Railways				0,00			
	National Navigation [a]				0,00			
	Pipeline Transport				0,00	0,00		
Other Sectors	Commercial/Institutional				0,00	0,00		
	Residential				0,00	0,00	0,00	0,00
	Agriculture / Forestry /				0,00	0,00		
	Fishing		0,00	0,00	0,00	0,00	0,00	
Other (not elsewhere specified)			0,00	0,00	0,00	0,00	0,00	
Total [a]			**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**
Memo: International Marine Bunkers					0,00			
Memo: International Aviation Bunkers					0,00			
CO_2 EMISSIONS (Gg)				0,00				
Energy Industries			0,00	0,00	0,00	0,00		
Manufacturing Industries and Construction			0,00	0,00	0,00	0,00		
Transport	Domestic Aviation [a]				0,00			
	Road				0,00			
	Railways				0,00			
	National Navigation [a]				0,00			
	Pipeline Transport				0,00	0,00		
Other Sectors	Commercial/Institutional				0,00	0,00		
	Residential				0,00	0,00	0,00	0,00
	Agriculture / Forestry /				0,00	0,00		
	Fishing	0,00			0,00	0,00		
Other (not elsewhere specified)			0,00	0,00	0,00	0,00	0,00	0,00
Total [a]			**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**
Memo: International Marine Bunkers					0,00			
Memo: International Aviation Bunkers					0,00			

MODULE	**ENERGY**							
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**							
WORKSHEET	**1-2 OVERVIEW**							
SHEET	**7 OF 8**							
COUNTRY	**ALGERIA**							
YEAR	**1994**							
			AK[b]	AL Total Liquid Fossil [c]	AM Total Solid Fossil [c]	AN Total Gaseous Fossil [c]	AO Total Other Fuels [c]	AP Total [d]
FUELCONSUMPTION (TJ)								
Energy Industries				27 108,38	0,00	453 266,20	0,00	480 374,58
Manufacturing Industries and Construction				20 550,30	12 518,53	56 796,50	0,00	89 865,33
Transport	Domestic Aviation [a]			12 812,04	0,00		0,00	12 812,04
	Road			146 399,68	0,00	0,00	0,00	146 399,68
	Railways			2 926,51	0,00		0,00	2 926,51
	National Navigation [a]			18 834,90	0,00		0,00	18 834,90
	Pipeline Transport			0,00	0,00	20 944,98	0,00	20 944,98
Other Sectors	Commercial/Institutional			0,00	0,00	0,00	0,00	0,00
	Residential			116 590,96	0,00	75 378,75	0,00	191 969,71
	Agriculture / Forestry / Fishing	Stationary		0,00	0,00	0,00	0,00	0,00
		Mobile		0,00	0,00		0,00	0,00
Other (not elsewhere specified)				0,00	0,00	0,00	0,00	0,00
Total [a]			**0,00**	**345 222,78**	**12 518,53**	**606 386,43**	**0,00**	**964 127,74**
Memo: International Marine Bunkers				5 296,17	12 518,53			5 296,17
Memo: International Aviation Bunkers				1 105,39	0,00			1 105,39
CO_2 EMISSIONS (Gg)								
Energy Industries				1 975,02	0,00	25 262,04	0,00	27 237,06
Manufacturing Industries and Construction				1 498,46	1 429,21	3 149,63	0,00	6 077,31
Transport	Domestic Aviation [a]			906,90	0,00		0,00	906,90
	Road			10 237,42	0,00	0,00	0,00	10 237,42
	Railways			214,59	0,00		0,00	214,59
	National Navigation [a]			1 382,71	0,00		0,00	1 382,71
	Pipeline Transport			0,00	0,00	1 169,14	0,00	1 169,14
Other Sectors	Commercial/Institutional			0,00	0,00	0,00	0,00	0,00
	Residential			7 840,52	0,00	4 180,10	0,00	12 020,62
	Agriculture / Forestry / Fishing	Stationary		0,00	0,00	0,00	0,00	0,00
		Mobile		0,00	0,00		0,00	0,00
Other (not elsewhere specified)				0,00	0,00	0,00	0,00	0,00
Total [a]				**24 055,62**	**1 429,21**	**33 760,91**	**0,00**	**59 245,74**
Memo: International Marine Bunkers				391,77	0,00			391,77
Memo: International Aviation Bunkers				78,24	0,00			78,24

MODULE	**ENERGY**							
SUBMODULE	**CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**							
WORKSHEET	**1-2 OVERVIEW**							
SHEET	**8 OF 8**							
COUNTRY	**ALGERIA**							
YEAR	**1994**							
			AQ Wood / Wood Waste	AR Charcoal	AS Other Solid Biomass	AT Liquid Biomass	AU Gaseous Biomass	AV Total Biomass
FUELCONSUMPTION (TJ)								
Energy Industries			0,00	0,00	0,00	0,00	0,00	0,00
Manufacturing Industries and Construction			0,00	0,00	0,00	0,00	0,00	0,00
Transport	Domestic Aviation [a]							0,00
	Road					0,00		0,00
	Railways							0,00
	National Navigation [a]							0,00
	Pipeline Transport							
Other Sectors	Commercial/Institutional		0,00	0,00	0,00	0,00	0,00	0,00
	Residential		2 260,87	0,00	0,00	0,00	0,00	2 260,87
	Agriculture / Forestry / Fishing		0,00	0,00	0,00	0,00	0,00	0,00
						0,00		0,00
Other (not elsewhere specified)			0,00	0,00	0,00		0,00	0,00
Total [a]			**2 260,87**	**0,00**	**0,00**	**0,00**	**0,00**	**2 260,87**
Memo: International Marine Bunkers								0,00
Memo: International Aviation Bunkers								0,00
CO_2 EMISSIONS (Gg)								
Energy Industries			0,00	0,00	0,00	0,,00	0,00	0,00
Manufacturing Industries and Construction			0,00	0,00	0,00	0,00	0,00	0,00
Transport	Domestic Aviation [a]							0,00
	Road					0,00		0,00
	Railways							0,00
	National Navigation [a]							0,00
	Pipeline Transport							
Other Sectors	Commercial/Institutional		0,00	0,00	0,00	0,00	0,00	0,00
	Residential		246,09	0,00	0,00	0,00	0,00	246,09
	Agriculture / Forestry / Fishing		0,00	0,00	0,00	0,00	0,00	0,00
						0,00		0,00
Other (not elsewhere specified)			0,00	0,00	0,00	0,00	0,00	0,00
Total [a]			**246,09**	**0,00**	**0,00**	**0,00**	**0,00**	**246,09**
Memo: International Marine Bunkers								0,00
Memo: International Aviation Bunkers								0,00

MODULE	**ENERGY**
SUBMODULE	**NON-CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-3**
SHEETS	**1 OF 3**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1

ACTIVITY			A Fuel Consumption (TJ)						
			A1 Coal	A2 Natural Gas	A3 Oil		A4 Wood / Wood Waste	A5 Charcoal	A6 Other Biomass and Wastes
Energy Industries			0	453 266,20		27 108,38			
Manufacturing Industries and Construction			10 048,32	56 796,50		20 550,30			
Transport	Domestic Aviation[a]					12 812,04			
	Road	Gasoline				101 721,09			
		Diesel				43 074,79			
		LPG				1 603,81			
	Railways					2 926,51			
	National Navigation[a]					18 834,90			
	Pipeline transport			20 944,98					
Other	Commercial/Institutional								
	Residential			75 378,75		116 590,96	2 260,87		
	Agriculture / Forestry / Fishing	Stationary							
		Mobile							
Other (not elsewhere specified)									
Total [a]			**10 048,32**	**606 386,43**		**345 222,78**	**2 260,87**	**0,00**	**0,00**
Memo: International Marine Bunkers						5 296,17			
Memo: International Aviation Bunkers						1 105,39			

MODULE	**ENERGY**
SUBMODULE	**NON-CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-3**
SHEETS	**2 OF 3 CH_4**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

ACTIVITY			B1 Coal	B2 Natural Gas	B3 Oil	B4 Wood / Wood Waste	B5 Charcoal	B6 Other Biomass and Wastes
			B Emission Factors (kg/TJ)					
Energy Industries			1	1	3	30	200	30
Manufacturing Industries and Construction			10	5	2	30	200	30
Transport	Domestic Aviation[(a)]				0,5			
	Road	Gasoline			20			
		Diesel			5			
		LPG			20			
	Railways				5			
	National Navigation[(a)]				5			
	Pipeline transport							
Other Sectors	Commercial/Institutional							
	Residential			5	10	300		
	Agriculture / Forestry / Fishing	Stationary						
		Mobile						
Other (not elsewhere specified)								
Total [(a)]								
Memo: Intern. Marine Bunkers					5			
Memo: Intern. Aviation Bunkers					0,5			

MODULE	**ENERGY**
SUBMODULE	**NON-CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-3**
SHEETS	**3 OF 3 CH_4**
COUNTRY	**ALGERIA**
YEAR	**1994**

			STEP 3						
			C						**D**
			Emissions by Fuel (kg)						**Emissions (Gg)**
ACTIVITY			C1 Coal	C2 Natural Gas	C3 Oil	C4 Wood / Wood Waste	C5 Charcoal	C6 Other Biomass and Wastes	D = sum (C1...C6)/ 1 000 000
Energy Industries			0,00	453 266,20	81 325,14	0,00	0,00	0,00	0,53
Manufacturing Industries and Construction			100 483,20	283 982,50	41 100,59	0,00	0,00	0,00	0,43
Transport	Domestic Aviation[a]				6 406,02				0,01
	Road				2034421,76				2,03
					215373,9315				0,22
					32 076,18				0,03
	Railways		0,00		14 632,54				0,01
	National Navigation[a]		0,00		94 174,50				0,09
	Pipeline transport								0,00
Other Sectors	Commercial/Institutional								
	Residential			376 893,74	1 165 909,63	678 261,60	0,00	0,00	2,22
	Agriculture / Forestry /								
	Fishing								
Other (not elsewhere specified)									
Total [a]			**100 483,20**	**1 114 142,44**	**3 685 420,30**	**678 261,60**	**0,00**	**0,00**	**5,58**
Memo: Intern. Marine Bunkers			0,00		26 480,83				0,03
Memo: Intern. Aviation Bunkers					552,69				0,00

MODULE	**ENERGY**
SUBMODULE	**NON-CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-3**
SHEETS	**2 OF 3 N_2O**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

ACTIVITY			**B** Emission Factors (kg/TJ)					
			B1 Coal	B2 Natural Gas	B3 Oil	B4 Wood / Wood Waste	B5 Charcoal	B6 Other Biomass and Wastes
Energy Industries			1,4	0,1	0,6	4	4	4
Manufacturing Industries and Construction			1,4	0,1	0,6	4	4	4
Transport	Domestic Aviation[(a)]				2			
	Road	Gasoline			0,6			
		Diesel			0,6			
		LPG			0,6			
	Railways		1,4		0,6			
	National Navigation[(a)]		1,4		0,6			
	Pipeline transport							
Sectors	Commercial/Institutional							
	Residential			0,1	0,6	1,4		
	Agriculture / Forestry / Fishing	Stationary						
		Mobile						
Other (not elsewhere specified)								
Total [(a)]								
Memo: International Marine Bunkers					0,6			
Memo: International Aviation Bunkers					2			

MODULE	**ENERGY**
SUBMODULE	**NON-CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-3**
SHEET	**3 OF 3 N_2O**
COUNTRY	**ALGERIA**
YEAR	**1994**

ACTIVITY			**STEP 3**						
			C **Emissions by Fuel (kg)**						**D** **Emissions (Gg)**
			C1 Coal	C2 Natural Gas	C3 Oil	C4 Wood / Wood Waste	C5 Charcoal	C6 Other Biomass and Wastes	D = sum (C1...C6)/ 1 000 000
Energy Industries			0,00	45 326,62	16 265,03	0,00	0,00	0,00	0,06
Manufacturing Industries and Construction			14 067,65	5 679,65	12 330,18	0,00	0,00	0,00	0,03
Transport	Domestic Aviation[a]				25 624,09				0,03
	Road				61032,6528				0,06
					25844,87178				0,03
					962,29				0,00
	Railways		0,00		1 755,90				0,00
	National Navigation[a]		0,00		11 300,94				0,01
	Pipeline transport								0,00
Other Sectors	Commercial/Institutional								
	Residential		0,00	7 537,87	69 954,58	3 165,22	0,00	0,00	0,08
	Agriculture / Forestry / Fishing								
Other (not elsewhere specified)									
Total [a]			**14 067,65**	**58 544,14**	**225 070,53**	**3 165,22**	**0,00**	**0,00**	**0,30**
Memo: Intern. Marine Bunkers			0,00		3 177,70				0,00
Memo: Intern. Aviation Bunkers					2 210,77				0,00

MODULE	**ENERGY**
SUBMODULE	**NON-CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-3**
SHEETS	**2 OF 3 NO_X**
COUNTRY	**ALGERIA**
YEAR	**1994**

			STEP 2					
			B					
			Emission Factors (kg/TJ)					
			B1	B2	B3	B4	B5	B6
ACTIVITY			Coal	Natural Gas	Oil	Wood / Wood Waste	Charcoal	Other Biomass and Wastes
Energy Industries			300	150	200	100	100	100
Manufacturing Industries and Construction			300	150	200	100	100	100
Transport	Domestic Aviation[(a)]				300			
	Road	Gasoline			600			
		Diesel			800			
		LPG			900			
	Railways				1200			
	National Navigation[(a)]				1500			
	Pipeline transport							
Other Sectors	Commercial/Institutional							
	Residential		100	50	100	100	100	100
	Agriculture / Forestry / Fishing	Stationary						
		Mobile						
Other (not elsewhere specified)								
Total [(a)]								
Memo: International Marine Bunkers					1500			
Memo: International Aviation Bunkers					300			

MODULE	**ENERGY**
SUBMODULE	**NON-CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-3**
SHEETS	**3 OF 3 NO_X**
COUNTRY	**ALGERIA**
YEAR	**1994**

			STEP 3						
			C						**D**
			Emissions by Fuel (kg)						**Emissions (Gg)**
ACTIVITY			C1 Coal	C2 Natural Gas	C3 Oil	C4 Wood / Wood Waste	C5 Charcoal	C6 Other Biomass and Wastes	D = sum (C1...C6)/ 1 000 000
Energy Industries			0,00	67 989 929,93	5 421 676,00	0,00	0,00	0,00	73,41
Manufacturing Industries and Construction			3 014 496,00	8 519 475,00	4 110 059,26	0,00	0,00	0,00	15,64
Transport	Domestic Aviation[(a)]				3 843 613,41				3,84
	Road				61032652,8				61,03
					34459829,04				34,46
					1 443 428,10				1,44
	Railways		0,00		3 511 809,84				3,51
	National Navigation[(a)]		0,00		28 252 349,85				28,25
	Pipeline transport								0,00
Other Sectors	Commercial/Institutional								
	Residential		0,00	3 768 937,40	11 659 096,33	226 087,20	0,00	0,00	15,65
	Agriculture / Forestry / Fishing								
Other (not elsewhere specified)									
Total [(a)]			**3 014 496,00**	**80 278 342,33**	**153 734 514,63**	**226 087,20**	**0,00**	**0,00**	**237,25**
Memo: Intern. Marine Bunkers			0,00		7 944 248,40				7,94
Memo: Intern. Aviation Bunkers					331 615,83				0,33

MODULE	**ENERGY**
SUBMODULE	**NON-CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-3**
SHEETS	**2 OF 3 CO**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

ACTIVITY			**B** **Emission Factors (kg/TJ)**					
			B1 Coal	B2 Natural Gas	B3 Oil	B4 Wood / Wood Waste	B5 Charcoal	B6 Other Biomass and Wastes
Energy Industries			20	20	15	1000	1000	1000
Manufacturing Industries and Construction			150	30	10	2000	4000	4000
Transport	Domestic Aviation[a]				100			
	Road	Gasoline			8000			
		Diesel			1000			
		LPG			2600			
	Railways				1000			
	National Navigation[a]				1000			
	Pipeline transport							
Other Sectors	Commercial/Institutional							
	Residential		2000	50	20	5000	7000	5000
	Agriculture / Forestry / Fishing	Stationary						
		Mobile						
Other (not elsewhere specified)								
Total [a]								
Memo: International Marine Bunkers					1000			
Memo: International Aviation Bunkers					100			

MODULE	**ENERGY**
SUBMODULE	**NON-CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-3**
SHEETS	**3 OF 3 CO**
COUNTRY	**ALGERIA**
YEAR	**1994**

			STEP 3						
			C						**D**
			Emissions by Fuel (kg)						**Emissions (Gg)**
			C1	C2	C3	C4	C5	C6	D = sum
ACTIVITY			Coal	Natural Gas	Oil	Wood / Wood Waste	Charcoal	Other Biomass and Wastes	(C1...C6)/ 1 000 000
Energy Industries			0,00	9 065 323,99	406 625,70	0,00	0,00	0,00	9,47
Manufacturing Industries and Construction			1 507 248,00	1 703 895,00	205 502,96	0,00	0,00	0,00	3,42
Transport	Domestic Aviation[(a)]				1 281 204,47				1,28
	Road				813768704				813,77
					43074786,3				43,07
					4 169 903,40				4,17
	Railways		0,00		2 926 508,20				2,93
	National Navigation[(a)]		0,00		18 834 899,90				18,83
	Pipeline transport								
Other Sectors	Commercial/Institutional		0,00						
	Residential			3 768 937,40	2 331 819,27	11 304 360,00	0,00	0,00	17,41
	Agriculture / Forestry /		0,00	0,00	0,00	0,00	0,00	0,00	0,00
	Fishing			0,00	0,00				0,00
Other (not elsewhere specified)			0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total [(a)]			**1 507 248,00**	**14 538 156,39**	**886 999 954,20**	**11 304 360,00**	**0,00**	**0,00**	**914,35**
Memo: Intern. Marine Bunkers			0,00		5 296 165,60				5,30
Memo: Intern. Aviation Bunkers					110 538,61				0,11

MODULE	**ENERGY**
SUBMODULE	**NON-CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-3**
SHEETS	**2 OF 3 NMVOC**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

ACTIVITY			**B** **Emission Factors (kg/TJ)**					
			B1 Coal	B2 Natural Gas	B3 Oil	B4 Wood / Wood Waste	B5 Charcoal	B6 Other Biomass and Wastes
Energy Industries			5	5	5	50	100	50
Manufacturing Industries and Construction			20	5	5	50	100	50
Transport	Domestic Aviation[a]				50			
	Road	Gasoline			1500			
		Diesel			200			
		LPG			600			
	Railways				200			
	National Navigation[a]				200			
	Pipeline transport							
Other Sectors	Commercial/Institutional							
	Residential		200	5	5	600	100	600
	Agriculture / Forestry / Fishing	Stationary						
		Mobile						
Other (not elsewhere specified)								
Total [a]								
Memo: International Marine Bunkers					200			
Memo: International Aviation Bunkers					50			

MODULE	**ENERGY**
SUBMODULE	**NON-CO_2 FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-3**
SHEETS	**3 OF 3 NMCOV**
COUNTRY	**ALGERIA**
YEAR	**1994**

			STEP 3						
			C **Emissions by Fuel (kg)**						**D** **Emissions (Gg)**
			C1	C2	C3	C4	C5	C6	D = sum (C1...C6)/ 1 000 000
ACTIVITY			Coal	Natural Gas	Oil	Wood / Wood Waste	Charcoal	Other Biomass and Wastes	
Energy Industries			0,00	2 266 331,00	135 541,90	0,00	0,00	0,00	2,40
Manufacturing Industries and Construction			200 966,40	283 982,50	102 751,48	0,00	0,00	0,00	0,59
Transport	Domestic Aviation[a]				640 602,24				0,64
	Road				152581632				152,58
					8614957,26				8,61
					962 285,40				0,96
	Railways		0,00		585 301,64				0,59
	National Navigation[a]		0,00		3 766 979,98				3,77
	Pipeline transport								0,00
Other Sectors	Commercial/Institutional								
	Residential		0,00	376 893,74	582 954,82	1 356 523,20	0,00	0,00	2,32
	Agriculture / Forestry / Fishing								
Other (not elsewhere specified)									
Total [a]			**200 966,40**	**2 927 207,24**	**167 973 006,71**	**1 356 523,20**	**0,00**	**0,00**	**172,46**
Memo: Intern. Marine Bunkers			0,00		1 059 233,12				1,06
Memo: Intern. Aviation Bunkers					55 269,31				0,06

MODULE	**ENERGY**
SUBMODULE	**SO_2 EMISSIONS FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-4**
SHEETS	**1 OF 6 NATIONAL**
COUNTRY	**ALGERIA**
YEAR	**1994**

		STEP 1	**STEP 2**					**STEP 3**	
		A Fuel Consumption (TJ)	B Sulphur content of fuel [(b)] (%)	C Sulphur retention in ash (%)	D Abatement efficiency (%)	E Net Calorific Value [(b)] (TJ/kt)	F SO_2 Emission Factor [(b)] (kg/TJ)	G Emissions (t)	H Emissions (Gg)
FUEL TYPE							F=2 x (B/100) x (1/E) x 1 000 000 x ((100-C)/100) x ((100-D)/100)	G=(AxF)/1 000	H=G/1000
Coal	low						0,00	0,00	0,00
	medium								
	high		3	1	30	27,2	1 528,68	0,00	0,00
Heavy Fuel Oil	low						0,00	0,00	0,00
	medium	3881,16	3,5	0,5	45	40,19	953,16	3 699,37	3,70
	high						0,00	0,00	0,00
Light Fuel Oil / Diesel	low						0,00	0,00	0,00
	high	96801,25	0,3	0,5	45	43,33	75,78	7 335,49	7,34
Diesel (road)		43077,99	0,1	0,5		43,33	45,93	1 978,43	1,98
Gasoline (road)		101718,31	0,001	0,5	1	44,8	0,44	44,73	0,04
Jet Kerosene		12811,608	0,005	0,5	0	44,59	2,23	28,59	0,03
Oil Shale							0,00	0,00	0,00
Other Oil							0,00	0,00	0,00
Natural Gas[(b)]		**591 427,37**	0	0	45	43,1	0,00	0,00	0,00
Municipal Waste							0,00	0,00	0,00
Industrial Waste							0,00	0,00	0,00
Black Liquor							0,00	0,00	0,00
Fuelwood		2260,872	0,2	0	1	14,65	270,31	611,13	0,61
Other Biomass							0,00	0,00	0,00
Total		**851978,56**						13 697,73	13,70
Memo: International Marine Bunkers		5296,3	0,1	1	1	43,3	45,27	239,76	0,02
Memo: International Aviation Bunkers		1105,32	0,005	1	1	44,59	43,96	48,59	0,00

MODULE	**ENERGY**
SUBMODULE	**SO_2 EMISSIONS FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-4**
SHEETS	**2 OF 6 ENERGY INDUSTRIES**
COUNTRY	**ALGERIA**
YEAR	**1994**

		STEP 1	**STEP 2**					**STEP 3**	
		A Fuel Consumption (TJ)	B Sulphur content of fuel [(b)] (%)	C Sulphur retention in ash (%)	D Abatement efficiency (%)	E Net Calorific Value [(b)] (TJ/kt)	F SO_2 Emission Factor [(b)] (kg/TJ)	G Emissions (t)	H Emissions (Gg)
FUEL TYPE							F=2 x (B/100) x (1/E) x 1 000 000 x ((100-C)/100) x ((100-D)/100)	G=(AxF)/1000	H=G/1000
Coal	low						0,00	0,00	0,00
	medium								
	high		3	1	30	27,2	1 528,68	0,00	0,00
Heavy Fuel Oil	low						0,00	0,00	0,00
	medium		3,5	0,5	45	40,19	953,16	0,00	0,00
	high						0,00	0,00	0,00
Light Fuel Oil / Diesel	low						0,00	0,00	0,00
	high	10178,1	0,3	0,5	45	43,33	75,78	771,30	0,77
Diesel (road)			0,1	0,5		43,33	45,93	0,00	0,00
Gasoline (road)			0,001	0,5	1	44,8	0,44	0,00	0,00
Jet Kerosene			0,005	0,5	0	44,59	2,23	0,00	0,00
Oil Shale							0,00	0,00	0,00
Other Oil							0,00	0,00	0,00
Natural Gas[(b)]		**457 910,32**	0	0	45	43,1	0,00	0,00	0,00
Municipal Waste							0,00	0,00	0,00
Industrial Waste							0,00	0,00	0,00
Black Liquor							0,00	0,00	0,00
Fuelwood			0,2	0	1	14,65	270,31	0,00	0,00
Other Biomass							0,00	0,00	0,00
Total		**468 088,42**						771,30	0,77

MODULE	**ENERGY**
SUBMODULE	**SO_2 EMISSIONS FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-4**
SHEETS	**3 OF 6 MANUFACTURING INDUSTRIES AND CONSTRUCTION**
COUNTRY	**ALGERIA**
YEAR	**1994**

		STEP 1	**STEP 2**					**STEP 3**	
		A Fuel Consumption (TJ)	B Sulphur content of fuel [(b)] (%)	C Sulphur retention in ash (%)	D Abatement efficiency (%)	E Net Calorific Value [(b)] (TJ/kt)	F SO_2 Emission Factor [(b)] (kg/TJ)	G Emissions (t)	H Emissions (Gg)
FUEL TYPE							F=2 x (B/100) x (1/E) x 1 000 000 x ((100-C)/100) x ((100-D)/100)	G=(AxF)/1000	H=G/1000
Coal	low						0,00	0,00	0,00
	medium								
	high		3	1	30	27,2	1 528,68	0,00	0,00
Heavy Fuel Oil	low						0,00	0,00	0,00
	medium	1674,72	3,5	0,5	45	40,19	953,16	1 596,28	1,60
	high						0,00	0,00	0,00
Light Fuel Oil / Diesel	low						0,00	0,00	0,00
	high	17777,15	0,3	0,5	45	43,33	75,78	1 347,13	1,35
Diesel (road)			0,1	0,5		43,33	45,93	0,00	0,00
Gasoline (road)			0,001	0,5	1	44,8	0,44	0,00	0,00
Jet Kerosene			0,005	0,5	0	44,59	2,23	0,00	0,00
Oil Shale							0,00	0,00	0,00
Other Oil							0,00	0,00	0,00
Natural Gas[(b)]		**57 359,16**	0	0	45	43,1	0,00	0,00	0,00
Municipal Waste							0,00	0,00	0,00
Industrial Waste							0,00	0,00	0,00
Black Liquor							0,00	0,00	0,00
Fuelwood			0,2	0	1	14,65	270,31	0,00	0,00
Other Biomass							0,00	0,00	0,00
Total		**76 811,03**						2 943,41	2,94

MODULE	**ENERGY**
SUBMODULE	**SO_2 EMISSIONS FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-4**
SHEETS	**4 OF 6 TRANSPORT**
COUNTRY	**ALGERIA**
YEAR	**1994**

		STEP 1	**STEP 2**					**STEP 3**	
		A Fuel Consumption (TJ)	B Sulphur content of fuel [(b)] (%)	C Sulphur retention in ash (%)	D Abatement efficiency (%)	E Net Calorific Value [(b)] (TJ/kt)	F SO_2 Emission Factor [(b)] (kg/TJ)	G Emissions (t)	H Emissions (Gg)
FUEL TYPE							F=2 x (B/100) x (1/E) x 1 000 000 x ((100-C)/100) x ((100-D)/100)	G=(AxF)/1000	H=G/1000
Coal	low						0,00	0,00	0,00
	medium								
	high		3	1	30	27,2	1 528,68	0,00	0,00
Heavy Fuel Oil	low						0,00	0,00	0,00
	medium	2206,44	3,5	0,5	45	40,19	953,16	2 103,09	2,10
	high						0,00	0,00	0,00
Light Fuel Oil / Diesel	low						0,00	0,00	0,00
	high	14087	0,3	0,5	45	43,33	75,78	1 067,50	1,07
Diesel (road)		43077,98	0,1	0,5		43,33	45,93	1 978,43	1,98
Gasoline (road)		101735,05	0,001	0,5	1	44,8	0,44	44,74	0,04
Jet Kerosene		12811,608	0,005	0,5	0	44,59	2,23	28,59	0,03
Oil Shale							0,00	0,00	0,00
Other Oil							0,00	0,00	0,00
Natural Gas[(b)]			0	0	45	43,1	0,00	0,00	0,00
Municipal Waste							0,00	0,00	0,00
Industrial Waste							0,00	0,00	0,00
Black Liquor							0,00	0,00	0,00
Fuelwood			0,2	0	1	14,65	270,31	0,00	0,00
Other Biomass							0,00	0,00	0,00
Total		**173918,078**						5 222,34	5,22

MODULE	**ENERGY**
SUBMODULE	**SO_2 EMISSIONS FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-4**
SHEETS	**5 OF 6 RESIDENTIAL/TERTIAIR SE/AGRICULTURE**
COUNTRY	**ALGERIA**
YEAR	**1994**

		STEP 1	STEP 2					STEP 3	
		A Fuel Consumption (TJ)	B Sulphur content of fuel [(b)] (%)	C Sulphur retention in ash (%)	D Abatement efficiency (%)	E Net Calorific Value [(b)] (TJ/kt)	F SO_2 Emission Factor [(b)] (kg/TJ)	G Emissions (t)	H Emissions (Gg)
FUEL TYPE							F=2 x (B/100) x (1/E) x 1 000 000 x ((100-C)/100) x ((100-D)/100)	G=(AxF)/1000	H=G/1000
Coal	low						0,00	0,00	0,00
	medium								
	high		3	1	30	27,2	1 528,68	0,00	0,00
Heavy Fuel Oil	low						0,00	0,00	0,00
	medium		3,5	0,5	45	40,19	953,16	0,00	0,00
	high						0,00	0,00	0,00
Light Fuel Oil / Diesel	low						0,00	0,00	0,00
	high	54759	0,3	0,5	45	43,33	75,78	4 149,58	4,15
Diesel (road)			0,1	0,5		43,33	45,93	0,00	0,00
Gasoline (road)			0,001	0,5	1	44,8	0,44	0,00	0,00
Jet Kerosene			0,005	0,5	0	44,59	2,23	0,00	0,00
Oil Shale							0,00	0,00	0,00
Other Oil							0,00	0,00	0,00
Natural Gas[(b)]		**76 157,89**	0	0	45	43,1	0,00	0,00	0,00
Municipal Waste							0,00	0,00	0,00
Industrial Waste							0,00	0,00	0,00
Black Liquor							0,00	0,00	0,00
Fuelwood		2260,872	0,2	0	1	14,65	270,31	611,13	0,61
Other Biomass							0,00	0,00	0,00
Total		**133 177,76**						4 760,71	4,76

MODULE	**ENERGY**
SUBMODULE	**SO_2 EMISSIONS FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)**
WORKSHEET	**1-4**
SHEETS	**6 OF 6 INTERNATIONAL BUNKERS**
COUNTRY	**ALGERIA**
YEAR	**1994**

		STEP 1	**STEP 2**					**STEP 3**	
		A Fuel Consumption (TJ)	B Sulphur content of fuel [b] (%)	C Sulphur retention in ash (%)	D Abatement efficiency (%)	E Net Calorific Value [b] (TJ/kt)	F SO_2 Emission Factor [b] (kg/TJ)	G Emissions (t)	H Emissions (Gg)
FUEL TYPE							F=2 x (B/100) x (1/E) x 1 000 000 x ((100-C)/100) x ((100-D)/100)	G=(AxF)/1000	H=G/1000
Coal	low						0,00	0,00	0,00
	medium								
	high		3	1	30	27,2	1 528,68	0,00	0,00
Heavy Fuel Oil	low						0,00	0,00	0,00
	medium		3,5	0,5	45	40,19	953,16	0,00	0,00
	high						0,00	0,00	0,00
Light Fuel Oil / Diesel	low						0,00	0,00	0,00
	high	1046,7	0,3	0,5	45	43,33	75,78	79,32	0,08
Diesel (road)			0,1	0,5		43,33	45,93	0,00	0,00
Gasoline (road)			0,001	0,5	1	44,8	0,44	0,00	0,00
Jet Kerosene		1105,315	0,005	0,5	0	44,59	2,23	2,47	0,00
Oil Shale							0,00	0,00	0,00
Other Oil							0,00	0,00	0,00
Natural Gas [b]			0	0	45	43,1	0,00	0,00	0,00
Municipal Waste							0,00	0,00	0,00
Industrial Waste							0,00	0,00	0,00
Black Liquor							0,00	0,00	0,00
Fuelwood			0,2	0	1	14,65	270,31	0,00	0,00
Other Biomass							0,00	0,00	0,00
Total		**2152,015**						81,78	0,08

MODULE	**ENERGY**
SUBMODULE	**METHANE EMISSIONS FROM OIL AND GAS ACTIVITIES (TIER 1)**
WORKSHEET	**1-7**
SHEETS	**1 OF 1**
COUNTRY	**ALGERIA**
YEAR	**1994**

Category	A Activity	B Emission Factor	C CH_4 Emissions (Kg CH_4)	D Emissions CH_4 (Gg CH_4)
			C = (A x B)	D = (C / 1 000 000)
OIL				
Exploration *(Optional if data is locally available)* [a]	*number of wells drilled* 28	*Kg CH_4 / well drilled*	0,00	0,00
Production [b]	*PJ oil produced* 2569,43916	*Kg CH_4 / PJ* 2500	6 423 597,90	6,42
Transport	*PJ oil loaded in tankers* 2203,136028	*Kg CH_4 / PJ* 745	1 641 336,34	1,64
Refining	*PJ oil refined* 891,034776	*Kg CH_4 / PJ refined* 750	668 276,08	0,67
Storage	*PJ oil refined* 891,034776	150	133 655,22	0,13
			TOTAL CH_4 FROM OIL	**8,87**
GAS				
Production [b] / Processing	*PJ gas produced* *2503,650088*	*Kg CH_4 / PJ* *70000*	175 255 506,16	175,26
Transmission and Distribution	*PJ gas transported by gazoduc* *534,779964* *PJ gas consumed* 1416,938724	*6805* *Kg CH_4 / PJ* 118000	3 639 177,66 167 198 769,43	3,64 167,20
Other Leakage	*PJ gas consumed* *- non-residential gas consumed* *329,794236* *- Residential gas consumed* *76,157892*	175000 87000	57 713 991,30 6 625 736,60	57,71 6,63
			TOTAL CH_4 FROM GAS	**410,44**
VENTING AND FLARING FROM OIL/GAS PRODUCTION [c]	*PJ oil and gas produced* *- Oil* 1832,227416 *- Gas* 2503,650088 *- Combined*	*Kg CH_4 / PJ* 8500 30000	15 573 933,04 75 109 502,64 0,00	15,57 75,11 0,00
			TOTAL CH_4 FROM OIL AND GAS	**90,68**

MODULE	**ENERGY**
SUBMODULE	**OZONE PRECURSORS AND SO_2 FROM OIL REFINING**
WORKSHEET	**1-8 OZONE PRECURSORS AND SO_2 FROM REFINING**
SHEETS	**1 of 4**
COUNTRY	**ALGERIA**
YEAR	**1994**

A Crude Oil Throughput (kt)	B Pollutant	C Emission factor [(a)] (kg/t)	D Emissions (t)	E Emissions (Gg)
			D=(AxC)	E=D/1000
19348	CO	0,09	1 741,32	1,74
	NO_x	0,06	1 160,88	1,16
	NMVOC	0,62	11 995,76	12,00
	SO_2	0,93	17 993,64	17,99

ANNEXE 2

PROCEDES INDUSTRIELS

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**CEMENT PRODUCTION**
WORKSHEET	**2-1**
SHEET	**1 OF 2 CO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1			
A Quantity of Clinker or Cement Produced (t)	B Emission Factor (t CO_2/t clinker or cement produced)	C CO_2 Emitted (t)	D CO_2 Emitted (Gg)
		C = (A x B)	D = C/1000
5067417	0,5071	2 569 687,16	2 569,69

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**CEMENT PRODUCTION**
WORKSHEET	**2-1**
SHEET	**2 OF 2 SO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2			
A Quantity of Cement Produced (t)	B Emission Factor (kg SO_2 /t cement produced)	C SO_2 Emitted (kg)	D SO_2 Emitted (Gg)
		C = (A x B)	D = C/1 000 000
6099755	0,3	1 829 926,50	1,83

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**PRODUCTION OF LIME**
WORKSHEET	**2-2**
SHEET	**1 OF 1 CO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

Lime Type	A Quantity of Lime Produced (t)	B Emission Factor (t CO_2/t quicklime or dolomitic lime produced)	C CO_2 Emitted (t)	D CO_2 Emitted (Gg)
			C = (A x B)	D = C/1000
Quicklime	44080	0,79	34 823,20	34,82
Dolomitic Lime			0,00	0,00
			Total (Gg):	34,82

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**LIMESTONE AND DOLOMITE USE**
WORKSHEET	**2-3**
SHEET	**1 OF 1 CO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

Material Type	A Quantity of Limestone or Dolomite Used (t)	B Emission Factor (kg CO_2/t limestone or dolomite used)	C CO_2 Emitted (kg)	D CO_2 Emitted (Gg)
			C = (A x B)	D = C/ 1000 000
Limestone	5648	440	2 485 120,00	2,49
Dolomite	2699	477	1 287 423,00	1,29
			Total (Gg):	3,77

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**SODA ASH PRODUCTION AND USE**
WORKSHEET	**2-4**
SHEET	**1 OF 2 SODA ASH PRODUCTION- CO_2 - EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1

A	B	C	D
Quantity of Trona Utilised (t)	Emission Factor (t CO_2/t trona utilised)	CO_2 Emitted (t)	CO_2 Emitted (Gg)
		C = (A x B)	D = C/1000
7264	0,097	704,61	0,70

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**SODA ASH PRODUCTION AND USE**
WORKSHEET	**2-4**
SHEET	**2 OF 2 SODA ASH USE - CO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

A	B	C	D
Quantity of Soda Ash Used (t)	Emission Factor (kg CO_2/t soda ash used)	CO_2 Emitted (kg)	CO_2 Emitted (Gg)
		C = (A x B)	D = C/1 000 000
1686	415	699 690,00	0,70

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**PRODUCTION AND USE OF MISCELLANEOUS MINERAL PRODUCTS**
WORKSHEET	**2-5**
SHEET	**1 OF 5 ASPHALT ROOFING PRODUCTION - NMVOC EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1

Process Type	A Quantity of Asphalt Roofing Produced (t)	B Emission Factor (kg NMVOC/t asphalt roofing produced)	C NMVOC Emitted (kg)	D NMVOC Emitted (Gg)
			C = (A x B)	D = C/1 000 000
Saturation Process	17000	2,4	40 800,00	0,04
			Total (Gg):	0,04

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**PRODUCTION AND USE OF MISCELLANEOUS MINERAL PRODUCTS**
WORKSHEET	**2-5**
SHEET	**2 OF 5 ASPHALT ROOFING PRODUCTION - CO EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

A Quantity of Asphalt Roofing Produced (t)	B Emission Factor (kg CO /t asphalt roofing produced)	C CO Emitted (kg)	D CO Emitted (Gg)
		C = (A x B)	D = C/1 000 000
17000	0,0095	161,50	0,00

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**PRODUCTION AND USE OF MISCELLANEOUS MINERAL PRODUCTS**
WORKSHEET	**2-5**
SHEET	**3 OF 5 ROAD PAVING WITH ASPHALT- NMVOC EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 3

Emission Source	A Quantity of Road Paving Material Used (t)	B Emission Factor (kg NMVOC/t road paving material used)	C NMVOC Emitted (kg)	D NMVOC Emitted (Gg)
			C = (A x B)	D = C/1 000 000
Asphalt Plant			0,00	0,00
Road Surface	210000	320	67 200 000,00	67,20
			Total (Gg):	67,20

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**PRODUCTION AND USE OF MISCELLANEOUS MINERAL PRODUCTS**
WORKSHEET	**2-5**
SHEET	**4 OF 5 PRODUCTION OF OTHER MINERAL PRODUCTS - GLASS PRODUCTION - NMVOC EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 4

Glass Type	A Quantity of Glass Produced (t)	B Emission Factor (kg NMVOC/t glass produced)	C NMVOC Emitted (kg)	D NMVOC Emitted (Gg)
			C = (A x B)	D = C/1 000 000
Container Glass	29194	4,5	131 373,00	0,13
			Total (Gg):	0,13

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**AMMONIA PRODUCTION**
WORKSHEET	**2-6**
SHEET	**1 OF 3 TIER 1a - CO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1

A Amount of Gas Consumed (m^3)	B Carbon Content of Gas (kg/m^3)	C Conversion Ratio	D CO_2 Emitted (kg)	E CO_2 Emitted (Gg)
		44/12	D = (A x B x C)	E = D/1 000 000
286018635	0,525	44/12	550 585 872,38	550,59

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**AMMONIA PRODUCTION**
WORKSHEET	**2-6**
SHEET	**2 OF 3 TIER 1b - CO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

A Amount of Ammonia Produced (t)	B Emission Factor (t CO_2/t ammonia produced)	C CO_2 Emitted (t)	D CO_2 Emitted (Gg)
		C = (A x B)	D = C/1000
295627	1,5	443 440,50	443,44

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**AMMONIA PRODUCTION**
WORKSHEET	**2-6**
SHEET	**3 OF 3 NMVOC, CO AND SO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 3					
A Amount of Ammonia Produced (t)	B Emission Factor (kg pollutant/ t ammonia produced)		C Pollutant Emitted (kg)	D Pollutant Emitted (Gg)	
			C = (A x B)	D = C/1 000 000	
295627	*NMVOC*	4,7	1 389 446,90	*NMVOC*	1,39
295627	*CO*	7,9	2 335 453,30	*CO*	2,34
295627	*SO_2*	0,03	8 868,81	*SO_2*	0,01

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**NITRIC ACID PRODUCTION**
WORKSHEET	**2-7**
SHEET	**I OF 1 N_2O AND NO_x EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

A Amount of Nitric Acid Produced (t)	B Emission Factor (kg pollutant/t nitric acid produced)		C Pollutant Emitted (kg)	D Pollutant Emitted (Gg)	
			C = (A x B)	D = C/1 000 000	
159577	*N_2O*	5,5	877 673,50	*N_2O*	0,88
159577	*NO_x*	15	2 393 655,00	*NO_x*	2,39

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**PRODUCTION OF OTHER CHEMICALS**
WORKSHEET	**2-10**
SHEET	**1 OF 5 CH_4 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1

Chemical	A Amount of Chemical Produced (t)	B Emission Factor (kg CH_4 / t chemical produced)	C CH_4 Emitted (kg)	D CH_4 Emitted (Gg)
			C = (A x B)	D = C/1 000 000
Méthanol	80180	2	160 360,00	0,16
Ethylène	78730	1	78 730,00	0,08
			0,00	0,00
			0,00	0,00
			0,00	0,00
			0,00	0,00
			0,00	0,00
			Total (Gg):	0,24

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**PRODUCTION OF OTHER CHEMICALS**
WORKSHEET	**2-10**
SHEET	**3 OF 5 NMVOC EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 3

Chemical	A Amount of Chemical Produced (t)	B Emission Factor (kg NMVOC / t chemical produced)	C NMVOC Emitted (kg)	D NMVOC Emitted (Gg)
			C = (A x B)	D = C/1 000 000
Polyéthylène	40536	3	121 608,00	0,12
Chlorure de polyvinyle	17150	8,5	145 775,00	0,15
Ethylène et propylène	78730	1,4	110 222,00	0,11
Formaldehhyde	5850	5	29 250,00	0,03
Polystyrère	536	2,8	1 500,80	0,00
			0,00	0,00
			Total (Gg):	0,41

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**PRODUCTION OF OTHER CHEMICALS**
WORKSHEET	**2-10**
SHEET	**5 OF 5 SO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 5

Chemical	A Amount of Chemical Produced (t)	B Emission Factor (kg SO_2 / t chemical produced)	C SO_2 Emitted (kg)	D SO_2 Emitted (Gg)
			C = (A x B)	D = C/1 000 000
Acide Sulfurique	207606	17,5	3 633 105,00	3,63
			0,00	0,00
			0,00	0,00
			0,00	0,00
			0,00	0,00
			0,00	0,00
			Total (Gg):	3,63

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**METAL PRODUCTION**
WORKSHEET	**2-11**
SHEET	**2 OF 11 IRON AND STEEL - TIER 1b - CO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

A Amount of Iron or Steel Produced (t)	B Emission Factor (t CO_2/t of iron or steel produced)	C CO_2 Emitted (t)	D CO_2 Emitted (Gg)
		C = (A x B)	D = C/1000
807115	1,6	1 291 384,00	1 291,38

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**METAL PRODUCTION**
WORKSHEET	**2-11**
SHEET	**3 OF 11 IRON AND STEEL - NO_x, NMVOC, CO AND SO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 3

A Amount of Iron or Steel Produced (t)	B Emission Factor (g gas/t of iron or steel produced)		C Gas Emitted (g)	D Gas Emitted (Gg)	
			C = (A x B)	D = C/1 000 000 000	
748500	*NO_x*	40	29 940 000,00	*NO_x*	0,03
919000	*NMVOC*	100	91 900 000,00	*NMVOC*	0,09
124000	*NMVOC*	30	3 720 000,00	*NMVOC*	0,00
919000	*CO*	1300	1 194 700 000,00	*CO*	1,19
124000	*CO*	1	124 000,00	*CO*	0,00
919000	*SO_2*	2000	1 838 000 000,00	*SO_2*	1,84
124000	*SO_2*	45	5 580 000,00	*SO_2*	0,01

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**METAL PRODUCTION**
WORKSHEET	**2-11**
SHEET	**5 OF 11 ALUMINIUM - TIER 1b - CO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 5

A Amount of Aluminium Produced (t)	B Emission Factor (t CO_2/t aluminium produced)	C CO_2 Emitted (t)	D CO_2 Emitted (Gg)
		C = (A x B)	D = C/1000
4102	1,5	6 153,00	6,15

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**METAL PRODUCTION**
WORKSHEET	**2-11**
SHEET	**8 OF 11 ALUMINIUM - TIER 1c - CF_4 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 8

A	B	C	D
Amount of Aluminium Produced (t)	Emission Factor (kg CF_4/t aluminium produced)	CF_4 Emitted (kg)	CF_4 Emitted (Gg)
		C = (A x B)	D = C/1 000 000
4102	0,05	205,10	0,00

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**METAL PRODUCTION**
WORKSHEET	**2-11**
SHEET	**9 OF 11 ALUMINIUM - TIER 1c - C_2F_6 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 9

A	B	C
Total CF_4 Emissions (Gg)	C_2F_6 Emission Factor (C_2F_6/CF_4)	C_2F_6 Emitted (Gg)
	0,1	C = (A x B)
0	0,1	0,00

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**METAL PRODUCTION -**
WORKSHEET	**2-11**
SHEET	**10 OF 11 ALUMINIUM - NO_x, CO, SO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 10

A Amount of Metal Produced (t)	B Emission Factor (kg gas/t aluminium produced)		C Pollutant Emitted (kg)	D Pollutant Emitted (Gg)	
Aluminium			C = (A x B)	D = C/1 000 000	
4102	*NO_x*	0	0,00	*NO_x*	0,00
4102	*CO*	400	1 640 800,00	*CO*	1,64
4102	*SO_2*	0,9	3 691,80	*SO_2*	0,00
Zinc					
24295	*SO_2*	14,2	344 989,00	*SO_2*	0,34

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**PULP AND PAPER INDUSTRIES**
WORKSHEET	**2-12**
SHEET	**1 OF 2 NO_x , NMVOC AND CO EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1

Pulp Process Type	A Quantity of Air Dried Pulp Produced (t)	B Emission Factor (kg gas /t air dried pulp produced)		C Pollutant Emitted (kg)	D Pollutant Emitted (Gg)	
				C = (A x B)	D = C/1 000 000	
Kraft	32702	*NO_x*	1,5	49 053,00	*NO_x*	0,05
Kraft	32702	*NMVOC*	3,7	120 997,40	*NMVOC*	0,12
Kraft	32702	*CO*	5,6	183 131,20	*CO*	0,18

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**PULP AND PAPER INDUSTRIES**
WORKSHEET	**2-12**
SHEET	**2 OF 2 SO_2 EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

Pulp Process Type	A Quantity of Air Dried Pulp Produced (t)	B Emission Factor (kg SO_2/t air dried pulp produced)	C SO_2 Emitted (kg)	D SO_2 Emitted (Gg)
			C = (A x B)	D = C/1 000 000
Kraft	32702	7	228 914,00	0,23
			0,00	0,00
			0,00	0,00
			Total (Gg):	0,23

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**FOOD AND DRINK**
WORKSHEET	**2-13**
SHEET	**1 OF 2 ALCOHOLIC BEVERAGE PRODUCTION - NMVOC EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1

Alcoholic Beverage Type	A Quantity of Alcoholic Beverage Produced (hl)	B Emission Factor (kg NMVOC/hL beverage produced)	C NMVOC Emitted (kg)	D NMVOC Emitted (Gg)
			C = (A x B)	D = C/1 000 000
Bière	397900	0,035	13 926,50	0,01
Vin	135410	0,06	8 124,60	0,01
			0,00	0,00
			0,00	0,00
			0,00	0,00
			Total (Gg):	0,02

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**FOOD AND DRINK**
WORKSHEET	**2-13**
SHEET	**2 OF 2 BREAD AND OTHER FOOD PRODUCTION - NMVOC EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

Food Production Type	A Quantity of Food Produced (t)	B Emission Factor (kg NMVOC/t food processed)	C NMVOC Emitted (kg)	D NMVOC Emitted (Gg)
			C = (A x B)	D = C/1 000 000
Viande, Poisson et Volaille	435002	0,3	130 500,60	0,13
Sucre	192800	10	1 928 000,00	1,93
Margarine et graisse solide	22000	10	220 000,00	0,22
Gâteaux, biscuits et céréales	16256	1	16 256,00	0,02
Pain	2480000	8	19 840 000,00	19,84
Aliments pour animaux	1331300	1	1 331 300,00	1,33
Torréfaction de café	72500	0,55	39 875,00	0,04
			0,00	0,00
			Total (Gg):	23,51

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**CONSUMPTION OF HALOCARBONS AND SULPHUR HEXAFLUORIDE**
WORKSHEET	**2-15**
SHEET	**2 OF 13 - TIER 1b ONLY - PRODUCT CONTAINING HALOCARBONS**
HALOCARBON NAME	
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

Type of Product	F Number of Units Imported (+) or Exported (-)	G Quantity of Material per Unit (kg)	H Fraction of Halocarbon in Material (%/100)		I Potential Product Halocarbon Emissions (t)
					I = F x G x H/1000
Réfrigérateurs	119100	0,5	HFCs	2	119,10
	119100	0,5	PFCs	2	119,10
Congélateurs	15830	0,5	HFCs	2	15,83
	15830	0,5	PFCs	2	15,83
Climatiseurs	4000	100	HFCs	2	800,00
	4000	100	PFCs	2	800,00
Solvants			HFCs		0,00
			PFCs		0,00
Aérosols en bombe	6549000		HFCs		0,00
			PFCs		0,00
Panneaux isothermes			HFCs		0,00
			PFCs		0,00
				Total HFCs (Gg)	934,93
				Total PFCs (Gg)	934,93
				TOTAL (Gg)	1 869,86

MODULE	**INDUSTRIAL PROCESSES**
SUBMODULE	**CONSUMPTION OF HALOCARBONS AND SULPHUR HEXAFLUORIDE - TIER 1a AND TIER 1b - SUMMARY OF HALOCARBONS EMISSIONS**
WORKSHEET	**2-15**
SHEET	**3 OF 13**
HALOCARBON NAME	
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 3

	J Potential Bulk Halocarbon Emissions (t)	K Potential Product Halocarbon Emissions (t)	L Total Potential Halocarbon Emission (t)	M Total Potential Halocarbon Emissions (Gg)
	J= E from Step 1	K= I from Step 2	L = J + K	M = L/1000
HFCs	0,00	934,93	934,93	0,93
PFCs	0,00	934,93	934,93	0,93

ANNEXE 3

AGRICULTURE

MODULE	**AGRICULTURE**
SUBMODULE	**METHANE AND NITROUS OXIDE EMISSIONS FROM DOMESTIC LIVESTOCK ENTERIC FERMENTATION AND MANURE MANAGEMENT**
WORKSHEET	**4-1**
SHEET	**1 OF 2 METHANE EMISSIONS FROM DOMESTIC LIVESTOCK ENTERIC FERMENTATION AND MANURE MANAGEMENT**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 1			**STEP 2**		**STEP 3**
Livestock Type	A Number of Animals (1000s)	B Emissions Factor for Enteric Fermentation (kg/head/yr)	C Emissions from Enteric Fermentation (t/yr)	D Emissions Factor for Manure Management (kg/head/yr)	E Emissions from Manure Management (t/yr)	F Total Annual Emissions from Domestic Livestock (Gg)
			C = (A x B)		E = (A x D)	F =(C + E)/1000
Dairy Cattle	748,47	36	26 944,92	2	1 496,94	28,44
Non-dairy Cattle	559,69	32	17 910,08	1	559,69	18,47
Buffalo	0	55	0,00	0	0,00	0,00
Sheep	18076,42	5	90 382,10	0,16	2 892,23	93,27
Goats	2667,41	5	13 337,05	0,17	453,46	13,79
Camels	114,26	46	5 255,96	1,92	219,38	5,48
Horses	72,08	18	1 297,44	1,64	118,21	1,42
Mules & Asses	341,54	10	3 415,40	0,9	307,39	3,72
Swine	0	1	0,00		0,00	0,00
Poultry	134884		0,00	0,018	2 427,91	2,43
Totals			158 542,95		8 475,21	167,02

MODULE	**AGRICULTURE**
SUBMODULE	**METHANE AND NITROUS OXIDE EMISSIONS FROM DOMESTIC LIVESTOCK ENTERIC FERMENTATION AND MANURE MANAGEMENT**
WORKSHEET	**4-1 (SUPPLEMENTAL)**
SPECIFY AWMS	**SOLID STORAGE AND DRYLOT**
SHEET	**NITROGEN EXCRETION FOR ANIMAL WASTE MANAGEMENT SYSTEM**
COUNTRY	**ALGERIA**
YEAR	**1994**

Livestock Type	A Number of Animals (1000s)	B Nitrogen Excretion Nex (kg//head/(yr)	C Fraction of Manure Nitrogen per AWMS (%/100) (fraction)	D Nitrogen Excretion per AWMS, Nex (kg/N/yr)
				D = (A x B x C)
Non-dairy Cattle	559,79	50000	0	0,00
Dairy Cattle	748,58	70000	0,4	20 960 240,00
Poultry	134884	600	0,4	32 372 160,00
Sheep	20743,83	12000	0,1	24 892 596,00
Swine	0	0	0	0,00
Others	560,54	40000	0,1	2 242 160,00
			TOTAL	80 467 156,00

MODULE	**AGRICULTURE**
SUBMODULE	**METHANE AND NITROUS OXIDE EMISSIONS FROM DOMESTIC LIVESTOCK ENTERIC FERMENTATION AND MANURE MANAGEMENT**
WORKSHEET	**4-1 (SUPPLEMENTAL)**
SPECIFY AWMS	**DAILY SPREAD**
SHEET	**NITROGEN EXCRETION FOR ANIMAL WASTE MANAGEMENT SYSTEM**
COUNTRY	**ALGERIA**
YEAR	**1994**

Livestock Type	A Number of Animals (1000s)	B Nitrogen Excretion Nex (kg//head/(yr)	C Fraction of Manure Nitrogen per AWMS (%/100) (fraction)	D Nitrogen Excretion per AWMS, Nex (kg/N/yr)
				D = (A x B x C)
Non-dairy Cattle	559,79	50000	0,2	5 597 900,00
Dairy Cattle	748,58	70000	0,4	20 960 240,00
Poultry	134884	600	0,4	32 372 160,00
Sheep	20743,83	12000	0,1	24 892 596,00
Swine	0	0		0,00
Others	560,54	40000	0,1	2 242 160,00
			TOTAL	86 065 056,00

MODULE	**AGRICULTURE**
SUBMODULE	**METHANE AND NITROUS OXIDE EMISSIONS FROM DOMESTIC LIVESTOCK ENTERIC FERMENTATION AND MANURE MANAGEMENT**
WORKSHEET	**4-1 (SUPPLEMENTAL)**
SPECIFY AWMS	**PASTURE RANGE AND PADDOCK**
SHEET	**NITROGEN EXCRETION FOR ANIMAL WASTE MANAGEMENT SYSTEM**
COUNTRY	**ALGERIA**
YEAR	**1994**

Livestock Type	A Number of Animals (1000s)	B Nitrogen Excretion Nex (kg//head/(yr)	C Fraction of Manure Nitrogen per AWMS (%/100) (fraction)	D Nitrogen Excretion per AWMS, Nex (kg/N/yr)
				D = (A x B x C)
Non-dairy Cattle	559,69	50000	0,8	22 387 600,00
Dairy Cattle	748,47	70000	0,2	10 478 580,00
Poultry	134884	600	0,2	16 186 080,00
Sheep	20743,83	12000	0,8	199 140 768,00
Swine	0	0	0	0,00
Others	560,54	40000	0,8	17 937 280,00
			TOTAL	266 130 308,00

MODULE	**AGRICULTURE**
SUBMODULE	**METHANE AND NITROUS OXIDE EMISSIONS FROM DOMESTIC LIVESTOCK ENTERIC FERMENTATION AND MANURE MANAGEMENT**
WORKSHEET	**4-1**
SHEET	**2 OF 2 NITROUS OXIDE EMISSIONS FROM ANIMAL PRODUCTION EMISSIONS FROM ANIMAL WASTE MANAGEMENT SYSTEMS (AWMS)**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 4

Animal Waste Management System (AWMS)	A Nitrogen Excretion $Nex_{(AWMS)}$ (kg N/yr)	B Emission Factor For AWMS EF_3 (kg N_2O–N/kg N)	C Total Annual Emissions of N_2O (Gg)
			C=(AxB)[44/28] / 1 000 000
Anaerobic lagoons	0,00		0,00
Liquid systems	0,00		0,00
Daily spread	86 065 056,00		
Solid storage & drylot	80 467 156,00	0,02	2,53
Pasture range and paddock	266 130 308,00		
Other	0,00		0,00
Total	432 662 520,00	**Total**	2,53

MODULE	**AGRICULTURE**
SUBMODULE	**FIELD BURNING OF AGRICULTURAL RESIDUES**
WORKSHEET	**4-4**
SHEET	**1 OF 3**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 1			STEP 2		STEP 3		
Crops (specify locally important crops)	A Annual Production (Gg crop)	B Residue to Crop Ratio	C Quantity of Residue (Gg biomass)	D Dry Matter Fraction	E Quantity of Dry Residue (Gg dm)	F Fraction Burned in Fields	G Fraction Oxidised	H Total Biomass Burned (Gg dm)
			C = (A x B)		E = (C x D)			H = (E x F xG)
Wheat (blé)	1188,965	1,3	1 545,65	0,83	1 282,89	0,1	0,9	115,46
Barley (orge)	680,126	1,2	816,15	0,83	677,41	0,1	0,9	60,97
Maize (mais)	0,357	1	0,36	0,4	0,14	0,1	0,9	0,01
Oats (avoine)	45,113	1,3	58,65	0,83	48,68	0,1	0,9	4,38
Rye (seigle)			0,00		0,00			0,00
Sorghoum(sorgho)	0,14	1,4	0,20	0,83	0,16	0,1	0,9	0,01
Millet (mil)			0,00		0,00			0,00
Pea (pois)	25,021	1,5	37,53	0,45	16,89	0,1	0,9	1,52
Bean (fèves)	23,532	2,1	49,42	0,45	22,24	0,1	0,9	2,00
Soya (soja)			0,00		0,00			0,00
Gesses Guerfafas	0,138	2,1	0,29	0,45	0,13	0,1	0,9	0,01
Potatoes(Pdeterre)	979,56	0,4	391,82	0,45	176,32	0,1	0,9	15,87
Feedbeet(fourrage)	754,478	0,3	226,34	0,15	33,95	0,1	0,9	3,06
Sugarbeet(Càsucre)			0,00		0,00			0,00
Artichoke)	6,049	0,8	4,84	0,45	2,18	0,1	0,9	0,20
Peanut (arachide)	3,398	1	3,40	0,45	1,53	0,1	0,9	0,14
Onion (oignon)	249,901	0,4	99,96	0,45	44,98	0,1	0,9	4,05
Allium (ail)	30	0,4	12,00	0,45	5,40	0,1	0,9	0,49
Tomatoes(tomates)	706,681	0,8	565,34	0,45	254,41	0,1	0,9	22,90
Tabaco(tabac)	5,593	1	5,59	0,45	2,52	0,1	0,9	0,23
Other (A cultures)	1324,322	0,8	1 059,46	0,45	476,76	0,1	0,9	42,91
Jachère et alfa	3007,9	0,3	902,37	0,15	135,36	0,1	0,9	12,18
Parcours steppiques 1470	1470	0,3	441,00	0,15	66,15	0,1	0,9	5,95
Zones humides	1200	1	1 200,00	0,4	480,00	0,1	0,9	43,20
Total:								335,53

MODULE	**AGRICULTURE**
SUBMODULE	**FIELD BURNING OF AGRICULTURAL RESIDUES**
WORKSHEET	**4-4**
SHEET	**2 OF 3**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 4		**STEP 5**	
Crops	I Carbon Fraction of Residue	J Total Carbon Released (Gg C)	K Nitrogen-Carbon Ratio	L Total Nitrogen Released (Gg N)
		J = (H x I)		L = (J x K)
Wheat (blé)	0,4853	56,03	0,012	0,67
Barley (orge)	0,4567	27,84	0,015	0,42
Maize (mais)	0,4709	0,01	0,02	0,00
Oats (avoine)	0,45	1,97	0,015	0,03
Rye (seigle)		0,00		0,00
Sorghoum(sorgho)	0,45	0,01	0,02	0,00
Millet (mil)		0,00		0,00
Pea (pois)	0,45	0,68	0,015	0,01
Bean (fèves)	0,45	0,90	0,015	0,01
Soya (soja)		0,00		0,00
Gesses Guerfafas	0,45	0,01	0,015	0,00
Potatoes(Pdeterre)	0,4226	6,71	0,015	0,10
Feedbeet(fourrage)	0,4072	1,24	0,015	0,02
Sugarbeet(Càsucre)		0,00		0,00
Artichoke)	0,45	0,09	0,015	0,00
Peanut (arachide)	0,45	0,06	0,015	0,00
Onion (oignon)	0,45	1,82	0,015	0,03
Allium (ail)	0,45	0,22	0,015	0,00
Tomatoes(tomates)	0,45	10,30	0,015	0,15
Tabaco(tabac)	0,45	0,10	0,015	0,00
Other (A cultures)	0,45	19,31	0,015	0,29
Jachère et alfa	0,45	5,48	0,015	0,08
Fourrages(parcours steppiques)	0,45	2,68	0,015	0,04
Plantes (zones humides)	0,4079	17,60	0,02	0,35
Total:		153,07		2,21

MODULE	**AGRICULTURE**			
SUBMODULE	**FIELD BURNING OF AGRICULTURAL RESIDUES**			
WORKSHEET	**4-4**			
SHEET	**3 OF 3**			
COUNTRY	**ALGERIA**			
YEAR	**1994**			
STEP 6				
	M Emission Ratio	N Emissions (Gg C **or** Gg N)	O Conversion Ratio	P Emissions from Field Burning of Agricultural Residues (Gg)
		N = (J x M)		P = (N x O)
CH_4	0,005	0,77	16/12	1,02
CO	0,06	9,18	28/12	21,43
		N = (L x M)		P = (N x O)
N_2O	0,007	0,02	44/28	0,02
NO_x	0,121	0,27	46/14	0,88

MODULE	**AGRICULTURE**		
SUBMODULE	**AGRICULTURAL SOILS**		
WORKSHEET	**4-5**		
SHEET	**1 OF 5 DIRECT NITROUS OXIDE EMISSIONS FROM AGRICULTURAL FIELDS, EXCLUDING CULTIVATION OF HISTOSOLS**		
COUNTRY	**ALGERIA**		
YEAR	**1994**		
	STEP 1	**STEP 2**	
Type of N input to soil	A Amount of N Input (kg N/yr)	B Factor for Direct Emissions EF_1 (kg N_2O–N/kg N)	C Direct Soil Emissions (Gg N_2O-N/yr)
			C = (A x B)/1 000 000
Synthetic fertiliser (F_{SN})	42 060 000,00	0,0125	0,53
Animal waste (F_{AW})	337 476 765,60	0,0125	4,22
N-fixing crops (F_{BN})	3 200 436	0,0125	0,04
Crop residue (F_{CR})	99 316 800,00	0,0125	1,24
		Total	6,03

MODULE	**AGRICULTURE**
SUBMODULE	**AGRICULTURAL SOILS**
WORKSHEET	**4-5A (SUPPLEMENTAL)**
SHEET	**1 OF 1 MANURE NITROGEN USED**
COUNTRY	**ALGERIA**
YEAR	**1994**

A Total Nitrogen Excretion (kg N/yr)	B Fraction of Nitrogen Burned for Fuel (fraction)	C Fraction of Nitrogen Excreted During Grazing (fraction)	D Fraction of Nitrogen Excreted Emitted as NO_X and NH_3 (fraction)	E Sum (fraction)	F Manure Nitrogen Used (corrected for NO_X and NH_3 emissions), F_{AW} (kg N/yr)
				F = 1 - (B + C + D)	F = (A x E)
432 662 520,00	0	0,02	0,2	0,78	337 476 765,60

MODULE	**AGRICULTURE**
SUBMODULE	**AGRICULTURAL SOILS**
WORKSHEET	**4-5B (SUPPLEMENTAL)**
SHEET	**1 OF 1 NITROGEN INPUT FROM CROP RESIDUES**
COUNTRY	**ALGERIA**
YEAR	**1994**

A Production of non - N - Fixing Crops (kg dry biomass/yr)	B Fraction of Nitrogen of non - N - Fixing Crops, (kg N/kg dry biomass)	C Production of Pulses and Soybeans (kg dry biomass/yr)	D Fraction of Nitrogen in N-Fixing Crops, (kg N/kg dry biomass)	E One minus the Fraction of Crop Residue Removed From Field, (fraction)	F One minus the Fraction of Crop Residue Burned (fraction)	G Nitrogen Input from Crop Residues, F_{CR} (kg N/yr)
						G = 2 x (A x B + C x D) x E x F
5974000000	0,015	53000000	0,03	0,55	0,99	99 316 800,00

MODULE	**AGRICULTURE**
SUBMODULE	**AGRICULTURAL SOILS**
WORKSHEET	**4-5**
SHEET	**2 OF 5 DIRECT NITROUS OXIDE EMISSIONS FROM CULTIVATION OF HISTOSOLS**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 3			**STEP 4**
	D Area of Cultivated Organic Soils F_{OS} (ha)	E Emission Factor for Direct Soil Emissions EF_2 (kg N_2O–N/ha/yr)	F Direct Emissions from Histosols (Gg N_2O–N/yr)	G Total Direct Emissions of N_2O (Gg)
			F=(D x E)/1 000 000	G = (C+F)[44/28]
Subtotal	0		0,00	9,47

MODULE	**AGRICULTURE**
SUBMODULE	**AGRICULTURAL SOILS**
WORKSHEET	**4-5**
SHEET	**3 OF 5 NITROUS OXIDE SOIL EMISSIONS FROM GRAZING ANIMALS - PASTURE RANGE AND PADDOCK**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 5		
Animal Waste Management System (AWMS)	A Nitrogen Excretion $Nex_{(AWMS)}$ (kg N/yr)	B Emission Factor for AWMS EF_3 (kg N_2O–N/kg N)	C Emissions Of N_2O from Grazing Animals (Gg)
			C = (A x B)[44/28]/1 000 000
Pasture range & paddock	266 130 308,00	0,02	8,36

MODULE	**AGRICULTURE**
SUBMODULE	**AGRICULTURAL SOILS**
WORKSHEET	**4-5**
SHEET	**4 OF 5 INDIRECT NITROUS OXIDE EMISSIONS FROM ATMOSPHERIC DEPOSITION OF NH_3 AND NO_X**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 6						
Type of Deposition	A Synthetic Fertiliser N Applied to Soil, N_{FERT} (kg N/yr)	B Fraction of Synthetic Fertiliser N Applied that Volatilizes $Frac_{GASFS}$ (kg N/kg N)	C Amount of Synthetic N Applied to Soil that Volatilizes (kg N/kg N)	D Total N Excretion by Livestock N_{EX} (kg N/yr)	E Fraction of Total Manure N Excreted that Volatilizes $Frac_{GASM}$ (kg N/kg N)	F Total N Excretion by Livestock that Volatilizes (kg N/kg N)	G Emission F EF_4 (kg N_2O–N/
			C = (A x B)			F = (D x E)	
Total	46735620	0,1	4 673 562,00	432 662 520,00	0,2	86 532 504,00	

MODULE	**AGRICULTURE**
SUBMODULE	**AGRICULTURAL SOILS**
WORKSHEET	**4-5**
SHEET	**5 OF 5 INDIRECT NITROUS OXIDE EMISSIONS FROM LEACHING**
COUNTRY	**ALGERIA**
YEAR	**1994**

	STEP 7					
	I Synthetic Fertiliser Use N_{FERT} (kg N/yr)	J Livestock N Excretion N_{EX} (kg N/yr)	K Fraction of N That Leaches $Frac_{LEACH}$ (kg N/kg N)	L Emission Factor EF_5	M Nitrous Oxide Emissions From Leaching (Gg N_2O–N/yr)	T N (

					M = (I + J) x K x L/1 000 000	N =
Total	46 735 620,00	432 662 520,00	0,3	0,025	3,60	

ANNEXE 4

CHANGEMENT D'AFFECTATION DES SOLS ET FORESTERIE

MODULE	**LAND USE CHANGE AND FORESTRY**
SUBMODULE	**CHANGES IN FOREST AND OTHER WOODY BIOMASS STOCKS**
WORKSHEET	**5-1**
SHEET	**1 OF 3**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1

Forest trees			A Area of Forest/Biomass Stocks (kha)	B Annual Growth Rate (t dm/ha)	C Annual Biomass Increment (kt dm)	D Carbon Fraction of Dry Matter	E Total Carbon Uptake Increment (kt C)
					C=(A x B)		E=(C x D)
Temperate	Plantations	*Eucalyptus spp*	52	1,65	85,80	0,5	42,90
		Juniper tree	277	1,25	346,25	0,5	173,13
		Cork oak	463	0,71	328,73	0,5	164,37
		Oak	419	1,25	523,75	0,5	261,88
		Hardwood	116	1,25	145,00	0,5	72,50
		Pinus spp	812	0,59	479,08	0,5	239,54
		Cédar	30	0,59	17,70	0,5	8,85
		Thuya	143	0,59	84,37	0,5	42,19
	Other Forests	*Maquis*	1329,5	0,12	159,54	0,5	79,77
		Seasonal			0,00		0,00
		Dry			0,00		0,00
	Other (specify)				0,00		0,00
	Plantations	Douglas fir			0,00		0,00
		Loblolly pine			0,00		0,00
	Commercial	Evergreen			0,00		0,00
		Deciduous			0,00		0,00
	Other				0,00		0,00
Boreal					0,00		0,00

Non-Forest Trees (specify type)	A Number of Trees (1000s of trees)	B Annual Growth Rate (kt dm/1000 trees)			
Olive tree	32462	0,004125	133,91	0,5	66,95
Citrus fruit	16252	0,004125	32,67	0,5	16,34
Fig	8342	0,002475	16,77	0,5	8,40
date tree	16872	0,002475	33,91	0,5	16,95
fruit tree	35486,4	0,002475	71,32	0,5	35,66
Vine	28234,4	0,002475	56,75	0,5	28,37
Road tree	4000	0,004	16,00	0,5	8,00
				Total	1 265,78

MODULE	**LAND USE CHANGE AND FORESTRY**
SUBMODULE	**CHANGES IN FOREST AND OTHER WOODY BIOMASS STOCKS**
WORKSHEET	**5-1**
SHEET	**2 OF 3**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2								
Harvest Categories (specify)	F Commercial Harvest (if applicable) (1000 m^3 roundwood)	G Biomass Conversion/ Expansion Ratio (if applicable) (t dm/m^3)	H Total Biomass Removed in Commercial Harvest (kt dm)	I Total Traditional Fuelwood Consumed (kt dm)	J Total Other Wood Use (kt dm)	K Total Biomass Consumption (kt dm)	L Wood Removed From Forest Clearing (kt dm)	M Total Biomass Consumption From Stocks (kt dm)
			H = (F x G)	FAO data		K = (H + I + J)	(From column M, Worksheet 5-2, sheet 3)	M = K - L
Work &industry wood	142,18	0,88	125,12			125,12		
Other Wood	39,12	0,88	34,43	0,116	0	34,54		
Oak wood			9,29			9,29		
Totals	181,30		168,84	0,12	0,00	168,95	0,00	168,95

MODULE	**LAND USE AND FORESTRY**
SUBMODULE	**CHANGES IN FOREST AND OTHER WOODY BIOMASS STOCKS**
WORKSHEET	**5-1**
SHEET	**3 OF 3**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 3		**STEP 4**	
N	O	P	Q
Carbon Fraction	Annual Carbon Release (kt C)	Net Annual Carbon Uptake (+) or Release (-) (kt C)	Convert to CO_2 Annual Emission (-) or Removal (+) (Gg CO_2)
	O = (M x N)	P = (E - O)	Q = (P x [44/12])

MODULE	**LAND-USE CHANGE AND FORESTRY**					
SUBMODULE	**FOREST AND GRASSLAND CONVERSION - CO_2 FROM BIOMASS**					
WORKSHEET	**5-2**					
SHEET	**1 OF 5 BIOMASS CLEARED**					
COUNTRY	**ALGERIA**					
YEAR	**1994**					
		STEP 1				
Vegetation types		A Area Converted Annually (kha)	B Biomass Before Conversion (t dm/ha)	C Biomass After Conversion (t dm/ha)	D Net Change in Biomass Density (t dm/ha)	E Annual Loss of Biomass (kt dm)
					D = (B - C)	E = (A x D)
Tropical	Wet/Very Moist				0,00	0,00
	Moist, short dry season				0,00	0,00
	Moist, long dry season				0,00	0,00
	Dry				0,00	0,00
	Montane Moist				0,00	0,00
	Montane Dry				0,00	0,00
Tropical Savanna/Grasslands					0,00	0,00
Temperate	Coniferous	16,82	220	10	210,00	3 532,20
	Broadleaf	12,18	175	10	165,00	2 009,70
Grasslands		91,61	10	0	10,00	916,10
Boreal	Mixed Broadleaf/ Coniferous				0,00	0,00
	Coniferous				0,00	0,00
	Forest-tundra				0,00	0,00
Grasslands/Tundra					0,00	0,00
Other					0,00	0,00
Subtotals		120,61			385,00	6 458,00

MODULE	**LAND-USE CHANGE AND FORESTRY**
SUBMODULE	**FOREST AND GRASSLAND CONVERSION - CO_2 FROM BIOMASS**
WORKSHEET	**5-2**
SHEET	**2 OF 5 CARBON RELEASED BY ON-SITE BURNING**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

	F Fraction of Biomass Burned on Site	G Quantity of Biomass Burned on Site (kt dm)	H Fraction of Biomass Oxidised on Site	I Quantity of Biomass Oxidised on Site (kt dm)	J Carbon Fraction of Above-ground Biomass (burned on site)	K Quantity of Carbon Released (from biomass burned) (kt C)
		G = (E x F)		I = (G x H)		K = (I x J)
Wet/Very Moist		0,00		0,00		0,00
Moist, short dry season		0,00		0,00		0,00
Moist, long dry season		0,00		0,00		0,00
Dry		0,00		0,00		0,00
Montane Moist		0,00		0,00		0,00
Montane Dry		0,00		0,00		0,00
		0,00		0,00		0,00
Coniferous	0,5	1 766,10	0,9	1 589,49	0,5	794,75
Broadleaf	0,5	1 004,85	0,9	904,37	0,5	452,18
	0,1	91,61	0,9	82,45	0,5	41,22
Mixed Broadleaf/Coniferous		0,00		0,00		0,00
Coniferous		0,00		0,00		0,00
Forest-tundra		0,00		0,00		0,00
		0,00		0,00		0,00
		0,00		0,00		0,00
					Subtotal	1 288,15

MODULE	**LAND-USE CHANGE AND FORESTRY**
SUBMODULE	**FOREST AND GRASSLAND CONVERSION - CO_2 FROM BIOMASS**
WORKSHEET	**5-2**
SHEET	**3 OF 5 CARBON RELEASED BY OFF-SITE BURNING**
COUNTRY	**ALGERIA**
YEAR	**1994**

Vegetation types		STEP 3						STEP 4
		L Fraction of Biomass Burned off Site	M Quantity of Biomass Burned off Site (kt dm)	N Fraction of Biomass Oxidised off Site	O Quantity of Biomass Oxidised off Site (kt dm)	P Carbon Fraction of Above-ground Biomass (burned off site)	Q Quantity of Carbon Released (from biomass burned off site) (kt C)	R Total Carbon Released (from on and off site burning) (kt C)
			M = (E x L)		O = (M x N)		Q = (O x P)	R = (K + Q)
Tropical	Wet/Very Moist		0,00		0,00		0,00	0,00
	Moist, short dry season		0,00		0,00		0,00	0,00
	Moist, long dry season		0,00		0,00		0,00	0,00
	Dry		0,00		0,00		0,00	0,00
	Montane Moist		0,00		0,00		0,00	0,00
	Montane Dry		0,00		0,00		0,00	0,00
Tropical Savanna/Grasslands			0,00		0,00		0,00	0,00
Temperate	Coniferous		0,00		0,00		0,00	794,75
	Broadleaf		0,00		0,00		0,00	452,18
Grasslands			0,00		0,00		0,00	41,22
Boreal	Mixed Broadleaf/ Coniferous		0,00		0,00		0,00	0,00
	Coniferous		0,00		0,00		0,00	0,00
	Forest- tundra		0,00		0,00		0,00	0,00
Grasslands/Tundra			0,00		0,00		0,00	0,00
Other			0,00		0,00		0,00	0,00
	Subtotals		0,00				0,00	1 288,15

MODULE	**LAND-USE CHANGE AND FORESTRY**
SUBMODULE	**FOREST AND GRASSLAND CONVERSION - CO_2 FROM BIOMASS**
WORKSHEET	**5-2**
SHEET	**5 OF 5 SUMMARY AND CONVERSION TO CO_2**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 6			
A Immediate Release From Burning (kt C)	B Delayed Emissions From Decay (kt C) (10-year average)	C Total Annual Carbon Release (kt C)	D Total Annual CO_2 Release (Gg CO_2)
		C = A + B	D = C x (44/12)
1 288,15	0,00	1 288,15	4 723,22

MODULE	**LAND-USE CHANGE AND FORESTRY**
SUBMODULE	**ON-SITE BURNING OF FORESTS - NON-CO_2 TRACE GASES FROM BURNING BIOMASS**
WORKSHEET	**5-3**
SHEET	**1 OF 1 NON-CO_2 GAS EMISSIONS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1			**STEP 2**				
A Quantity of Carbon Released (kt C)	B Nitrogen-Carbon Ratio	C Total Nitrogen Released (kt N)		D Trace Gas Emissions Ratios	E Trace Gas Emissions (kt C)	F Conversion Ratio	G Trace Gas Emissions from Burning of Cleared Forests (Gg CH_4, CO)
(From column K, sheet 2 of Worksheet 5-2)		C = (A x B)			E = (A x D)		G = (E x F)
			CH_4	0,012	15,46	16/12	20,61
			CO	0,06	77,29	28/12	180,34
					(kt N)		(Gg N_2O, NO_x)
1 288,15	0,01	12,88			E = (C x D)		G = (E x F)
			N_2O	0,07	0,90	44/28	1,42
			NO_x	0,121	1,56	46/14	5,12

MODULE	**LAND-USE CHANGE AND FORESTRY**
SUBMODULE	**CALCULATION OF TOTAL CO_2-C EMISSIONS FROM AGRICULTURALLY-IMPACTED SOILS**
WORKSHEET	**5-5**
SHEET	**4 OF 4**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 6				
Source	A Worksheet values	B Unit Conversion Factor	C Total Annual Carbon Emissions (Gg)	D Convert to Total Annual CO_2 Emission (Gg/yr)
			C = (A x B)	D= C x (44/12)
Total Net Change in Soil Carbon in Mineral Soils	-40,60	-50	2 030,00	7 443,33
Total Net Carbon Loss from Organic Soils	0,00	0,001	0,00	0,00
Carbon Emissions from Liming	0,00	0,001	0,00	0,00
			Total	7 443,33

ANNEXE 5

DECHETS

MODULE	**WASTE**
SUBMODULE	**METHANE EMISSIONS FROM SOLID WASTE DISPOSAL SITES**
WORKSHEET	**6-1**
SHEET	**1 OF 1**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1	**STEP 2**	**STEP 3**						**STEP 4**				
A Total Annual MSW Disposed to SWDSs (Gg MSW)	B Methane Correction Factor (MCF)	C Fraction of DOC in MSW	D Fraction of DOC which Actually Degrades	E Fraction of Carbon Released as Methane	F Conversion Ratio	G Potential Methane Generation Rate per Unit of Waste (Gg CH_4/Gg MSW)	H Realised (Country-specific) Methane Generation Rate per Unit of Waste (Gg CH_4/ Gg MSW)	J Gross Annual Methane Generation (Gg CH_4)	K Recovered Methane per Year (Gg CH_4)	L Net Annual Methane Generation (Gg CH_4)	M One Minus Methane Oxidation Correction Factor	N Net Annual Methane Emissions (Gg CH_4)
						G= (C x D x E x F)	H= (B x G)	J= (H x A)		L= (J - K)		N= (L x M)
1 437.25	0.6	0.17	0.77	0.5	16/12	0.09	0.05	77.61	0	77.61	1	77.61
1544.13	0.6	0.17	0.77	0.5	16/12	0.09	0.05	80.85	0	80.85	1	80.85
711.07	0.6	0.17	0.77	0.5	16/12	0.09	0.05	37.23	0	37.23	1	37.23

MODULE	**WASTE**
SUBMODULE	**QUANTITY OF MSW DISPOSED OF IN SOLID WASTE DISPOSAL SITES USING COUNTRY DATA**
WORKSHEET	**6-1A (SUPPLEMENTAL)**
SHEET	**1 OF 1**
COUNTRY	**ALGERIA**
YEAR	**1994**

A Population whose Waste goes to SWDSs (Urban or Total) (persons)	B MSW Generation Rate (kg/capita/day)	C Annual Amount of MSW Generated (Gg MSW)	D Fraction of MSW Disposed to SWDSs (Urban or Total)	E Total Annual MSW Disposed to SWDSs (Gg MSW)
		C = (A x B x 365)/1 000 000		E = (C x D)
6 617 916	0.85	2 053.21	0.7	1 437.25
8 058 073	0.75	2 205.90	0.7	1 544.13
4 281 597	0.65	1 015.81	0.7	711.07

MODULE	**WASTE**
SUBMODULE	**METHANE CORRECTION FACTOR**
WORKSHEET	**6-1C (SUPPLEMENTAL)**
SHEET	**1 OF 1**
COUNTRY	**ALGERIA**
YEAR	**1994**

Type of Site	W Proportion of Waste (by weight) for Each Type of SWDSs	X Methane Correction Factor (MCF)	Y Weighted Average MCF for Each Type of SWDS
			Y = W x X
Managed	0	1	0.00
Unmanaged - deep (>=5m waste)	0	0.8	0.00
Unmanaged - shallow (< 5m waste)	1	0.4	0.40
Total		0.6	0.60

MODULE	**WASTE**
SUBMODULE	**METHANE EMISSIONS FROM DOMESTIC AND COMMERCIAL WASTEWATER AND SLUDGE TREATMENT**
WORKSHEET	**6-2**
SHEET	**1 OF 4 ESTIMATION OF ORGANIC WASTEWATER AND SLUDGE**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 1

A Region or City	B Population (1,000 persons)	C Degradable Organic Component (kg BOD/1000 persons/yr)	D Fraction of Degradable Organic Component Removed as Sludge	E Total Domestic/Commercial Organic Wastewater (kg BOD/yr)	F Total Domestic/Commercial Organic Sludge (kg BOD/yr)
				E = [B x C x (1-D)]	F = (B x C x D)
				0.00	0.00
Zones urbaines	18958	14235	0	269 867 130.00	0.00
				0.00	0.00
				0.00	0.00
			Total:	269 867 130.00	0.00

MODULE	**WASTE**
SUBMODULE	**METHANE EMISSIONS FROM DOMESTIC AND COMMERCIAL WASTEWATER TREATMENT**
WORKSHEET	**6-2**
SHEET	**2 OF 4 ESTIMATION OF EMISSION FACTOR FOR WASTEWATER HANDLING SYSTEMS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

A Wastewater Handling System	B Fraction of Wastewater Treated by the Handling System	C Methane Conversion Factor for the Handling System	D Product	E Maximum Methane Producing Capacity (kg CH_4/kg BOD)	F Emission Factor for Domestic/Commercial Wastewater (kg CH_4/kg BOD)
			D = (B x C)		F = (D x E)
lagunage	0.2	0.8	0.16		
			0.00		
			0.00		
			0.00		
		Aggregate MCF:	0.16	0.25	0.04

MODULE	**WASTE**
SUBMODULE	**METHANE EMISSIONS FROM DOMESTIC AND COMMERCIAL WASTEWATER AND SLUDGE TREATMENT**
WORKSHEET	**6-2**
SHEET	**4 OF 4 ESTIMATION OF METHANE EMISSIONS FROM DOMESTIC/COMMERCIAL WASTEWATER AND SLUDGE**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 4

	A Total Organic Product (kg BOD/yr)	B Emission Factor (kg CH_4/kg BOD)	C Methane Emissions Without Recovery/Flaring	D Methane Recovered and/or Flared (kg CH_4)	E Net Methane Emissions (Gg CH_4)
	from Worksheet 6-2, Sheet 1	from Worksheet 6-2, Sheets 2 and 3	C = (A x B)		E = (C - D)/1 000 000
Wastewater	269 867 130.00	0.04	10 794 685.20		10.79
Sludge	0.00	0.00	0.00		0.00
				Total:	10.79

MODULE	**WASTE**						
SUBMODULE	**METHANE EMISSIONS FROM INDUSTRIAL WASTEWATER AND SLUDGE HANDLING**						
WORKSHEET	**6-3**						
SHEET	**1 OF 4 TOTAL ORGANIC WASTEWATER AND SLUDGE**						
COUNTRY	**ALGERIA**						
YEAR	**1994**						
				STEP 1			
		A Total Industrial Output (t/yr)	B Degradable Organic Component (kg COD/m^3 wastewater)	C Wastewater Produced (m^3/tonne product)	D Fraction of Degradable Organic Component Removed as Sludge	E Total Organic Wastewater from Industrial Source (kg COD/yr)	F Total Organic Sludge from Industrial Source (kg COD/yr)
						E = [A x B x C x(1-D)]	F = (A x B x C x D)
Iron and Steel		1 800 000	0.006	16	0	172 800.00	0.00
Non-ferrous metals		24354	0.006	5	0.1	657.56	73.06
Fertiliser		379 500	1.3	2.1	0	1 036 035.00	0.00
Food & Beverage	Canneries	6 868 900	6	1.4	0	57 698 760.00	0.00
	Beer	407 900	1.5	5	0	3 059 250.00	0.00
	Wine	13441	13	5	0	873 665.00	0.00
	Meatpacking	3578	3	72		772 848.00	0.00
	Dairy products	1044040	1.5	2.8	0	4 384 968.00	0.00
	Sugar	192 900	98	2.1	0	39 698 820.00	0.00
	Fish processing					0.00	0.00
	Oil & grease	409 100	0.3	1.6	0	196 368.00	0.00
	Coffee					0.00	0.00
	Soft drinks	171 000	6	2.1	0	2 154 600.00	0.00
	Other					0.00	0.00
Paper & Pulp	Paper	142 300	3	72		30 736 800.00	0.00
	Pulp	3530	5	72		1 270 800.00	0.00
	Other					0.00	0.00
Petroleum refining/Petrochemicals		21 282 000	0.35	1.2	0	8 938 440.00	0.00
	Bleaching	146 245	1.3	1.2	0	228 142.20	0.00
	Dying					0.00	0.00
	Other					0.00	0.00
Rubber						0.00	0.00
Other		31418	1.3	1.2	0	49 012.08	0.00
					Total	151 271 965.84	73.06

MODULE	**WASTE**
SUBMODULE	**METHANE EMISSIONS FROM INDUSTRIAL WASTEWATER TREATMENT**
SOURCE	
WORKSHEET	**6-3**
SHEET	**2 OF 4 ESTIMATION OF EMISSION FACTOR FOR WASTEWATER HANDLING SYSTEMS**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 2

A Wastewater Handling System	B Fraction of Wastewater Treated by the Handling System	C Methane Conversion Factor (MCF)	D Product	E Maximum Methane Producing Capacity (kg CH_4/kg DC)	F Emission Factor for Industrial Wastewater Source (kg CH_4/kg COD)
			D = (B x C)		F = (D x E)
lagunage	0.1	0.8	0.08		
			0.00		
			0.00		
			0.00		
		Aggregate MCF:	0.08	0.25	0.02

MODULE	**WASTE**
SUBMODULE	**METHANE EMISSIONS FROM INDUSTRIAL WASTEWATER AND SLUDGE TREATMENT**
WORKSHEET	**6-3**
SHEET	**4 OF 4 ESTIMATION OF METHANE EMISSIONS FROM INDUSTRIAL WASTEWATER AND SLUDGE**
COUNTRY	**ALGERIA**
YEAR	**1994**

STEP 4

	A Total Organic Product (kg COD/yr)	B Emission Factor (kg CH_4/kg COD)	C Methane Emissions without Recovery/Flaring	D Methane Recovered and/or Flared (kg CH_4)	E Net Methane Emissions (Gg CH_4)
	Worksheet 6-3, Sheet 1	Worksheets 6-3, Sheets 2 and 3	C = (A x B)		E = (C - D) / 1 000 000
Wastewater	151 271 965.84	0.02	3 025 439.32		3.03
Sludge	73.06	0.00	0.00		0.00
				Total:	3.03

MODULE	**WASTE**
SUBMODULE	**INDIRECT NITROUS OXIDE EMISSIONS FROM HUMAN SEWAGE**
WORKSHEET	**6-4**
SHEET	**1 OF 1**
COUNTRY	**ALGERIA**
YEAR	**1994**

	A Per Capita Protein Consumption (Protein in kg/person/yr)	B Population (number)	C Fraction of Nitrogen in Protein $Frac_{NPR}$ (kg N/kg protein)	D Emission factor EF_6 (kg N_2O-N/kg sewage-N produced)	E Total Annual N_2O Emissions (Gg N_2O/yr)
					E = (A x B x C x D) x (44/28) / 1 000 000
Total	20	26743075	0.16	0.01	1.34