

MODULE			ENERGY					
SUBMODULE			CO ₂ FROM ENERGY SOURCES (REFERENCE APPROACH)					
WORKSHEET			1-1					
SHEETS			1 OF 5					
COUNTRY			0					
YEAR			0					
			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						0.00
		Orimulsion						0.00
		Natural Gas Liquids						0.00
	Secondary Fuels	Gasoline						0.00
		Jet Kerosene						0.00
		Other Kerosene						0.00
		Shale Oil						0.00
		Gas / Diesel Oil						0.00
		Residual Fuel Oil						0.00
		LPG						0.00
		Ethane						0.00
		Naphtha						0.00
		Bitumen						0.00
		Lubricants						0.00
		Petroleum Coke						0.00
		Refinery Feedstocks						0.00
		Other Oil						0.00
Liquid Fossil Totals								
Solid Fossil	Primary Fuels	Anthracite ^(a)					0.00	
		Coking Coal					0.00	
		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					0.00	
		Solid Fuel Totals						
Gaseous Fossil		Natural Gas (Dry)					0.00	
Total								
Biomass total								
	Solid Biomass						0.00	
	Liquid Biomass						0.00	
	Gas Biomass						0.00	

(a) If anthracite is not separately available, include with Other Bituminous Coal.

This spreadsheet contains sheet 1 of Worksheet 1-1, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY
SUBMODULE	CO ₂ FROM ENERGY SOURCES (REFERENCE APPROACH)
WORKSHEET	1-1
SHEETS	1 OF 5
COUNTRY	0
YEAR	0

MODULE			ENERGY				
SUBMODULE			CO ₂ FROM ENERGY SOURCES (REFERENCE APPROACH)				
WORKSHEET			1-1				
SHEETS			2 OF 5				
COUNTRY			0				
YEAR			0				
			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=(F _x G)		J=(H _x I)	K=(J/1000)
Liquid Fossil	Primary Fuels	Crude Oil		0.00		0.00	0.00
		Orimulsion		0.00		0.00	0.00
		Natural Gas Liquids		0.00		0.00	0.00
	Secondary Fuels	Gasoline		0.00		0.00	0.00
		Jet Kerosene		0.00		0.00	0.00
		Other Kerosene		0.00		0.00	0.00
		Shale Oil		0.00		0.00	0.00
		Gas / Diesel Oil		0.00		0.00	0.00
		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
		Bitumen		0.00		0.00	0.00
		Lubricants		0.00		0.00	0.00
		Petroleum Coke		0.00		0.00	0.00
		Refinery Feedstocks		0.00		0.00	0.00
		Other Oil		0.00		0.00	0.00
Liquid Fossil Totals				0.00		0.00	0.00
Solid Fossil	Primary Fuels	Anthracite ^(a)		0.00		0.00	0.00
		Coking Coal		0.00		0.00	0.00
		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		0.00	0.00
Gaseous Fossil		Natural Gas (Dry)		0.00		0.00	0.00
Total				0.00		0.00	0.00
Biomass total				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

(a) If anthracite is not separately available, include with Other Bituminous Coal.

This spreadsheet contains sheet 2 of Worksheet 1-1, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY
SUBMODULE	CO ₂ FROM ENERGY SOURCES (REFERENCE APPROACH)
WORKSHEET	1-1
SHEETS	2 OF 5
COUNTRY	0
YEAR	0

(b) Please specify units.

MODULE			ENERGY				
SUBMODULE			CO ₂ FROM ENERGY SOURCES (REFERENCE APPROACH)				
WORKSHEET			1-1				
SHEETS			3 OF 5				
COUNTRY			0				
YEAR			0				
			STEP 4		STEP 5		STEP 6
			L	M	N	O	P
			Carbon Stored (Gg C)	Net Carbon Emissions (Gg C)	Fraction of Carbon Oxidised	Actual Carbon Emissions (Gg C)	Actual CO ₂ Emissions (Gg CO ₂)
FUEL TYPES				M=(K-L)		O=(MxN)	P=(Ox[44/12])
Liquid Fossil	Primary Fuels	Crude Oil		0.00		0.00	0.00
		Orimulsion		0.00		0.00	0.00
		Natural Gas Liquids		0.00		0.00	0.00
	Secondary Fuels	Gasoline		0.00		0.00	0.00
		Jet Kerosene		0.00		0.00	0.00
		Other Kerosene		0.00		0.00	0.00
		Shale Oil		0.00		0.00	0.00
		Gas / Diesel Oil	0.00	0.00		0.00	0.00
		Residual Fuel Oil		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
		Bitumen	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
		Refinery Feedstocks		0.00		0.00	0.00
		Other Oil		0.00		0.00	0.00
Liquid Fossil Totals			0.00	0.00		0.00	0.00
Solid Fossil	Primary Fuels	Anthracite ^(a)		0.00		0.00	0.00
		Coking Coal	0.00	0.00		0.00	0.00
		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	0.00		0.00	0.00
Gaseous Fossil		Natural Gas (Dry)	0.00	0.00		0.00	0.00
Total			0.00	0.00		0.00	0.00
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

(a) If anthracite is not separately available, include with Other Bituminous Coal.

This spreadsheet contains sheet 3 of Worksheet 1-1, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY
SUBMODULE	CO ₂ FROM ENERGY SOURCES (REFERENCE APPROACH)
WORKSHEET	1-1
SHEETS	3 OF 5
COUNTRY	0
YEAR	0

This spreadsheet contains sheet 4 of Worksheet 1-1, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

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		0					
YEAR		0					
		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=(Cx D)	F=(E/1000)
Solid 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
Liquid Fossil	Gasoline	0.00	0.00	0.00	0.00	0.00	0.00
	Jet Kerosene	0.00	0.00	0.00	0.00	0.00	0.00
	Gas / Diesel Oil	0.00	0.00	0.00	0.00	0.00	0.00
	Residual Fuel Oil	0.00	0.00	0.00	0.00	0.00	0.00
	Lubricants	0.00	0.00	0.00	0.00	0.00	0.00
		Total		0.00			

(a) Quantities taken from column "International Bunkers" from Worksheet 1-1, Sheet 1 of 5.

This spreadsheet contains sheet 5 of Worksheet 1-1, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY					
SUBMODULE		CO ₂ FROM ENERGY SOURCES (REFERENCE APPROACH)					
WORKSHEET		1-1					
SHEETS		5 OF 5 EMISSIONS FROM INTERNATIONAL BUNKERS (INTERNATIONAL MARINE AND AIR TRANSPORT)					
COUNTRY		0					
YEAR		0					
		STEP 4			STEP 5		STEP 6
		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			$H=(F \times G)$	$I=(F-H)$		$K=(I \times J)$	$L=(K \times [44/12])$
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		0.00	0.00		0.00	0.00
	Residual Fuel Oil		0.00	0.00		0.00	0.00
	Lubricants	0.5	0.00	0.00		0.00	0.00
		Total ^(a)					0.00

(a) The bunkers emissions are not to be added to national totals.

This spreadsheet contains Auxiliary Worksheet 1-1, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY							
SUBMODULE	CO₂ FROM ENERGY							
WORKSHEET	AUXILIARY WORKSHEET 1-1: ESTIMATING CARBON STORED IN PRODUCTS.							
SHEETS	1 OF 1							
COUNTRY	0							
YEAR	0							
	A	B	C	D	E	F	G	H
	Estimated Fuel Quantities	Conversion Factor (TJ/Unit)	Estimated Fuel Quantities (TJ)	Carbon Emission Factor (t C/TJ)	Carbon Content (t C)	Carbon Content (Gg C)	Fraction of Carbon Stored	Carbon Stored (Gg C)
FUEL TYPES			$C=(A \times B)$		$E=(C \times D)$	$F=(E/1000)$		$H=(F \times G)$
Naphtha ^(a)			0.00		0.00	0.00	0.8	0.00
Lubricants			0.00		0.00	0.00	0.5	0.00
Bitumen			0.00		0.00	0.00	1	0.00
Coal Oils and Tars (from Coking Coal)			0.00		0.00	0.00	0.75	0.00
Natural Gas ^(a)			0.00		0.00	0.00	0.33	0.00
Gas/Diesel Oil ^(a)			0.00		0.00	0.00	0.5	0.00
LPG ^(a)			0.00		0.00	0.00	0.8	0.00
Ethane ^(a)			0.00		0.00	0.00	0.8	0.00
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

(a) Enter these fuels when they are used as feedstocks.

(b) Use the Other Fuels rows to enter any other products in which carbon may be stored.

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.

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MODULE	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	0					
YEAR	0					
	STEP 1	STEP 2		STEP 3		
ENERGY INDUSTRIES	A	B	C	D	E	F
	Consumption	Conversion Factor (TJ/Unit)	Consumption (TJ)	Carbon Emission Factor (t C/TJ)	Carbon Content (t C)	Carbon Content (Gg C)
			C=(AxB)		E=(Cx D)	F=(E/1000)
Crude Oil ^(a)			0.00		0.00	0.00
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			0.00		0.00	0.00
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			0.00		0.00	0.00
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
			0.00		0.00	0.00
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			0.00		0.00	0.00
			0.00		0.00	0.00
			0.00		0.00	0.00
			0.00		0.00	

(a) Include only consumption of crude that is burned, not crude oil which is refined into petroleum products.

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	0					
YEAR	0					
				STEP 5		STEP 6
ENERGY INDUSTRIES	G	H	I	J	K	L
	Fraction of Carbon Stored	Carbon Stored (Gg C)	Net Carbon Emissions (Gg C)	Fraction of Carbon Oxidised	Actual Carbon Emissions (Gg C)	Actual CO ₂ Emissions (Gg CO ₂)
		H=(F×G)	I=(F-H)		K=(I×J)	L=(K×[44/12])
Crude Oil ^(a)		0.00	0.00		0.00	0.00
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	0.00		0.00	0.00
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 ^(b)		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	0.00		0.00	0.00
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					0.00
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

(a) Include only consumption of crude that is burned, not crude oil which is refined into petroleum products.

(b) Use a value of 0.5 for lubricants.

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					
	AUTOGENERATION					
COUNTRY	0					
YEAR	0					
	STEP 1	STEP 2		STEP 3		
MANUFACTURING INDUSTRIES AND CONSTRUCTION	A	B	C	D	E	F
	Consumption	Conversion	Consumption	Carbon Emission	Carbon	Carbon
		Factor	(TJ)	Factor	Content	Content
		(TJ/Unit)		(t C/TJ)	(t C)	(Gg C)
			C=(AxB)		E=(Cx D)	F=(E/1000)
Crude Oil			0.00		0.00	0.00
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			0.00		0.00	0.00
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			0.00		0.00	0.00
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		0.00			
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			

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this d

This spreadsheet contains sheet 3 of Worksheet 1-2, in accordance with the
Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

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
	AUTOGENERATION
COUNTRY	0
YEAR	0

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					
	AUTOGENERATION					
COUNTRY	0					
YEAR	0					
MANUFACTURING INDUSTRIES AND CONSTRUCTION	STEP 4			STEP 5		STEP 6
	G	H	I	J	K	L
	Fraction of Carbon Stored ^(a)	Carbon Stored (Gg C) ^(a)	Net Carbon Emissions (Gg C)	Fraction of Carbon Oxidised	Actual Carbon Emissions (Gg C)	Actual CO ₂ Emissions (Gg CO ₂)
		H=(F×G)	I=(F-H)		K=(I×J)	L=(K×[44/12])
Crude Oil		0.00	0.00		0.00	0.00
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	(b)	0.00	0.00		0.00	0.00
Residual Fuel Oil		0.00	0.00		0.00	0.00
LPG	(b)	0.00	0.00		0.00	0.00
Ethane	(b)	0.00	0.00		0.00	0.00
Naphtha	(b)	0.00	0.00		0.00	0.00
Lubricants	(c)	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	(b)	0.00	0.00		0.00	0.00
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	0.00
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

(a) For naphtha, natural gas, gas/diesel oil, LPG and any other fuels used as feedstocks, do not fill out Column G. Complete Column H, using Auxiliary Worksheet 1-2a.

(b) Use Auxiliary Worksheet 1-2a to fill out the cells for these products.

(c) Use a value of 0.5 for lubricants.

ocumentation box.

This spreadsheet contains sheet 4 of Worksheet 1-2, in accordance with the
Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

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
	AUTOGENERATION
COUNTRY	0
YEAR	0

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					
	PROCESS HEAT					
COUNTRY	0					
YEAR	0					
	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)
			$C=(A \times B)$		$E=(C \times D)$	$F=(E/1000)$
Crude Oil			0.00		0.00	0.00
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			0.00		0.00	0.00
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			0.00		0.00	0.00
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		0.00			
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					
	PROCESS HEAT					
COUNTRY	0					
YEAR	0					
	STEP 4			STEP 5		STEP 6
MANUFACTURING INDUSTRIES AND CONSTRUCTION	G	H	I	J	K	L
	Fraction of Carbon Stored ^(a)	Carbon Stored (Gg C) ^(a)	Net Carbon Emissions (Gg C)	Fraction of Carbon Oxidised	Actual Carbon Emissions (Gg C)	Actual CO ₂ Emissions (Gg CO ₂)
		H=(F×G)	I=(F-H)		K=(I×J)	L=(K×[44/12])
Crude Oil		0.00	0.00		0.00	0.00
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		(b) 0.00	0.00		0.00	0.00
Residual Fuel Oil		0.00	0.00		0.00	0.00
LPG		(b) 0.00	0.00		0.00	0.00
Ethane		(b) 0.00	0.00		0.00	0.00
Naphtha		(b) 0.00	0.00		0.00	0.00
Lubricants	(c)	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		(b) 0.00	0.00		0.00	0.00
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					0.00
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

(a) For naphtha, natural gas, gas/diesel oil, LPG and any other fuels used as feedstocks, do not fill out Column G. Complete Column H, using Auxiliary Worksheet 1-2a.

(b) Use Auxiliary Worksheet 1-2a to fill out the cells for these products.

(c) Use a value of 0.5 for lubricants.

This spreadsheet contains Auxiliary Worksheet 1-2, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

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	0							
YEAR	0							
	A	B	C	D	E	F	G	H
	Feedstock Use	Conversion Factor (TJ/Unit)	Feedstock Use (TJ)	Carbon Emission Factor (t C/TJ)	Carbon Content (t C)	Carbon Content (Gg C)	Fraction of Carbon Stored	Carbon Stored (Gg C)
FUEL TYPES			$C=(A \times B)$		$E=(C \times D)$	$F=(E/1000)$		$H=(F \times G)$
Gas/Diesel Oil			0.00		0.00	0.00	0.5	0.00
LPG			0.00		0.00	0.00	0.8	0.00
Ethane			0.00		0.00	0.00	0.8	0.00
Naphtha			0.00		0.00	0.00	0.8	0.00
Natural Gas			0.00		0.00	0.00	0.33	0.00
Other Fuels ^(a)			0.00		0.00	0.00		0.00
			0.00		0.00	0.00		0.00
			0.00		0.00	0.00		0.00

(a) Please specify. Enter the results of this calculation in Worksheet 1-2 Step by Step Calculation, Sheet 4, in the cells marked with (b).

Documentation box: Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentat

ion box.

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	0					
YEAR	0					
	STEP 1	STEP 2		STEP 3		
TRANSPORT	A	B	C	D	E	F
	Consumption	Conversion Factor (TJ/Unit)	Consumption (TJ)	Carbon Emission Factor (t C/TJ)	Carbon Content (t C)	Carbon Content (Gg C)
			C=(AxB)		E=(Cx D)	F=(E/1000)
Domestic Aviation ^(a)						
Gasoline			0.00		0.00	0.00
Jet Kerosene			0.00		0.00	0.00
			0.00		0.00	0.00
	Subtotal		0.00			
Road Transport						
Natural Gas			0.00		0.00	0.00
LPG			0.00		0.00	0.00
Gasoline			0.00		0.00	0.00
Gas/Diesel Oil			0.00		0.00	0.00
			0.00		0.00	0.00
	Subtotal		0.00			
Rail Transport						
Gas/Diesel Oil			0.00		0.00	0.00
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		0.00			
National Navigation ^(a)						
Gasoline			0.00		0.00	0.00
Gas/Diesel Oil			0.00		0.00	0.00
Residual Fuel Oil			0.00		0.00	0.00
Lubricants			0.00		0.00	0.00
Sub-Bituminous Coal			0.00		0.00	0.00
			0.00		0.00	0.00
	Subtotal		0.00			
Pipeline Transport						
Natural Gas			0.00		0.00	0.00
			0.00		0.00	0.00
			0.00		0.00	0.00
	Subtotal		0.00			
	Total Transport ^(a)		0.00			
Memo items:						
Liquid Biomass			0.00		0.00	0.00
			0.00		0.00	0.00
	Total Biomass		0.00			

(a) Excluding international bunkers.

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	0					
YEAR	0					
	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=(F×G)	I=(F-H)		K=(I×J)	L=(K×[44/12])
Domestic Aviation ^(a)						
Gasoline		0.00	0.00		0.00	0.00
Jet Kerosene		0.00	0.00		0.00	0.00
		0.00	0.00		0.00	0.00
	Subtotal					0.00
Road Transport						
Natural Gas		0.00	0.00		0.00	0.00
LPG		0.00	0.00		0.00	0.00
Gasoline		0.00	0.00		0.00	0.00
Gas/Diesel Oil		0.00	0.00		0.00	0.00
		0.00	0.00		0.00	0.00
	Subtotal					0.00
Rail Transport						
Gas/Diesel Oil		0.00	0.00		0.00	0.00
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					0.00
National Navigation ^(a)						
Gasoline		0.00	0.00		0.00	0.00
Gas/Diesel Oil		0.00	0.00		0.00	0.00
Residual Fuel Oil		0.00	0.00		0.00	0.00
Lubricants	(b)	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
	Subtotal					0.00
Pipeline Transport						
Natural Gas		0.00	0.00		0.00	0.00
		0.00	0.00		0.00	0.00
		0.00	0.00		0.00	0.00
	Subtotal					0.00
	Total Transport ^(a)					0.00
Memo items:						
Liquid Biomass		0.00	0.00		0.00	0.00
		0.00	0.00		0.00	0.00
	Total Biomass					0.00

(a) Excluding international bunkers.

(b) Use a value of 0.5 for lubricants.

This spreadsheet contains sheet 7 of Worksheet 1-2, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

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	0					
YEAR	0					
	STEP 1	STEP 2		STEP 3		
MEMO ITEMS: INTERNATIONAL BUNKERS	A	B	C	D	E	F
	Consumption	Conversion	Consumption	Carbon Emission	Carbon	Carbon
		Factor (TJ/Unit)	(TJ)	Factor (t C/TJ)	Content (t C)	Content (Gg C)
			C=(AxB)		E=(CxD)	F=(E/1000)
Intl. Marine Bunkers						
Gasoline			0.00		0.00	0.00
Gas/Diesel Oil			0.00		0.00	0.00
Residual Fuel Oil			0.00		0.00	0.00
Lubricants			0.00		0.00	0.00
Sub-Bituminous Coal			0.00		0.00	0.00
			0.00		0.00	0.00
	Total		0.00			
Intl. Aviation Bunkers						
Gasoline			0.00		0.00	0.00
Jet Kerosene			0.00		0.00	0.00
			0.00		0.00	0.00
	Total		0.00			

Note: Emissions of International Bunkers are excluded from national totals and are reported for informational purposes only.

This spreadsheet contains sheet 8 of Worksheet 1-2, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

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	0					
YEAR	0					
	STEP 4			STEP 5		STEP 6
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=(F×G)	I=(F-H)		K=(I×J)	L=(K×[44/12])
Intl. Marine Bunkers						
Gasoline		0.00	0.00		0.00	0.00
Gas/Diesel Oil		0.00	0.00		0.00	0.00
Residual Fuel Oil		0.00	0.00		0.00	0.00
Lubricants	(a)	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					0.00
Intl. Aviation Bunkers						
Gasoline		0.00	0.00		0.00	0.00
Jet Kerosene		0.00	0.00		0.00	0.00
		0.00	0.00		0.00	0.00
	Total					0.00

(a) Use a value of 0.5 for lubricants.

Note: Emissions of International Bunkers are excluded from national totals and are reported for informational purposes only.

This spreadsheet contains sheet 9 of Worksheet 1-2, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY					
SUBMODULE	CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET	1-2 STEP BY STEP CALCULATIONS					
SHEETS	9 OF 16 COMMERCIAL / INSTITUTIONAL SECTOR					
	AUTOGENERATION					
COUNTRY	0					
YEAR	0					
	STEP 1	STEP 2		STEP 3		
COMMERCIAL / INSTITUTIONAL SECTOR	A	B	C	D	E	F
	Consumption	Conversion	Consumption	Carbon Emission	Carbon	Carbon
		Factor (TJ/Unit)	(TJ)	Factor (t C/TJ)	Content (t C)	Content (Gg C)
			C=(AxB)		E=(Cx D)	F=(E/1000)
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			0.00		0.00	0.00
Residual Fuel Oil			0.00		0.00	0.00
LPG			0.00		0.00	0.00
Anthracite			0.00		0.00	0.00
Other Bituminous Coal			0.00		0.00	0.00
Lignite			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			0.00		0.00	0.00
			0.00		0.00	0.00
			0.00		0.00	0.00
	Total		0.00			
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			

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources

This spreadsheet contains sheet 10 of Worksheet 1-2, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY					
SUBMODULE	CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET	1-2 STEP BY STEP CALCULATIONS					
SHEETS	10 OF 16 COMMERCIAL / INSTITUTIONAL SECTOR					
	AUTOGENERATION					
COUNTRY	0					
YEAR	0					
	STEP 4			STEP 5		STEP 6
COMMERCIAL / INSTITUTIONAL SECTOR	G	H	I	J	K	L
	Fraction of Carbon Stored	Carbon Stored (Gg C)	Net Carbon Emissions (Gg C)	Fraction of Carbon Oxidised	Actual Carbon Emissions (Gg C)	Actual CO ₂ Emissions (Gg CO ₂)
		H=(F×G)	I=(F-H)		K=(I×J)	L=(K×[44/12])
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	0.00		0.00	0.00
Residual Fuel Oil		0.00	0.00		0.00	0.00
LPG		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
Lignite		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	0.00		0.00	0.00
		0.00	0.00		0.00	0.00
		0.00	0.00		0.00	0.00
	Total					0.00
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

s in this documentation box.

This spreadsheet contains sheet 9 of Worksheet 1-2, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY					
SUBMODULE	CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET	1-2 STEP BY STEP CALCULATIONS					
SHEETS	9 OF 16 COMMERCIAL / INSTITUTIONAL SECTOR					
	PROCESS HEAT					
COUNTRY	0					
YEAR	0					
	STEP 1	STEP 2		STEP 3		
COMMERCIAL / INSTITUTIONAL SECTOR	A	B	C	D	E	F
	Consumption	Conversion	Consumption	Carbon	Carbon	Carbon
		Factor (TJ/Unit)	(TJ)	Emission Factor (t C/TJ)	Content (t C)	Content (Gg C)
			C=(AxB)		E=(Cx D)	F=(E/1000)
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			0.00		0.00	0.00
Residual Fuel Oil			0.00		0.00	0.00
LPG			0.00		0.00	0.00
Anthracite			0.00		0.00	0.00
Other Bituminous Coal			0.00		0.00	0.00
Lignite			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			0.00		0.00	0.00
			0.00		0.00	0.00
			0.00		0.00	0.00
	Total		0.00			
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			

Documentation box:

This spreadsheet contains sheet 10 of Worksheet 1-2, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY					
SUBMODULE	CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET	1-2 STEP BY STEP CALCULATIONS					
SHEETS	10 OF 16 COMMERCIAL / INSTITUTIONAL SECTOR					
	PROCESS HEAT					
COUNTRY	0					
YEAR	0					
	STEP 4			STEP 5		STEP 6
COMMERCIAL / INSTITUTIONAL SECTOR	G	H	I	J	K	L
	Fraction of Carbon Stored	Carbon Stored (Gg C)	Net Carbon Emissions (Gg C)	Fraction of Carbon Oxidised	Actual Carbon Emissions (Gg C)	Actual CO ₂ Emissions (Gg CO ₂)
		H=(F×G)	I=(F-H)		K=(I×J)	L=(K×[44/12])
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	0.00		0.00	0.00
Residual Fuel Oil		0.00	0.00		0.00	0.00
LPG		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
Lignite		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	0.00		0.00	0.00
		0.00	0.00		0.00	0.00
		0.00	0.00		0.00	0.00
	Total					0.00
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



This spreadsheet contains sheet 11 of Worksheet 1-2, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

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	0					
YEAR	0					
	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)
			$C=(A \times B)$		$E=(C \times D)$	$F=(E/1000)$
Gasoline			0.00		0.00	0.00
Other Kerosene			0.00		0.00	0.00
Gas/Diesel Oil			0.00		0.00	0.00
Residual Fuel Oil			0.00		0.00	0.00
LPG			0.00		0.00	0.00
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			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		0.00			
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			

This spreadsheet contains sheet 12 of Worksheet 1-2, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY					
SUBMODULE	CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET	1-2 STEP BY STEP CALCULATIONS					
SHEETS	12 OF 16 RESIDENTIAL SECTOR					
COUNTRY	0					
YEAR	0					
	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=(F×G)	I=(F-H)		K=(I×J)	L=(K×[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	0.00		0.00	0.00
Residual Fuel Oil		0.00	0.00		0.00	0.00
LPG		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
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	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	0.00		0.00	0.00
	Total					0.00
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	CO₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET	1-2 STEP BY STEP CALCULATIONS					
SHEETS	13 OF 16 AGRICULTURE / FORESTRY / FISHING					
COUNTRY	0					
YEAR	0					
	STEP 1	STEP 2		STEP 3		
AGRICULTURE / FORESTRY / FISHING	A Consumption	B Conversion Factor (TJ/Unit)	C Consumption (TJ) C=(AxB)	D Carbon Emission Factor (t C/TJ)	E Carbon Content (t C) E=(Cx D)	F Carbon Content (Gg C) F=(E/1000)
Mobile						
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			0.00		0.00	0.00
Residual Fuel Oil			0.00		0.00	0.00
LPG			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 Mobile		0.00			
Stationary						
Gasoline			0.00		0.00	0.00
Other Kerosene			0.00		0.00	0.00
Gas/Diesel Oil			0.00		0.00	0.00
Residual Fuel Oil			0.00		0.00	0.00
LPG			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
Lignite			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
Natural gas			0.00		0.00	0.00
			0.00		0.00	0.00
			0.00		0.00	0.00
	Total Stationary		0.00			
Memo items:						
Mobile						
Liquid Biomass			0.00		0.00	0.00
Stationary						
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	14 OF 16 AGRICULTURE / FORESTRY / FISHING					
COUNTRY	0					
YEAR	0					
	STEP 4			STEP 5		STEP 6
AGRICULTURE / FORESTRY / FISHING	G Fraction of Carbon Stored ^(a)	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=(F×G)	I=(F-H)		K=(I×J)	L=(K×[44/12])
Mobile						
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	0.00		0.00	0.00
Residual Fuel Oil		0.00	0.00		0.00	0.00
LPG		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 Mobile					0.00
Stationary						
Gasoline		0.00	0.00		0.00	0.00
Other Kerosene		0.00	0.00		0.00	0.00
Gas/Diesel Oil		0.00	0.00		0.00	0.00
Residual Fuel Oil		0.00	0.00		0.00	0.00
LPG		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
Lignite		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
Natural gas		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 Stationary					0.00
Memo items:						
Mobile						
Liquid Biomass		0.00	0.00		0.00	0.00
Stationary						
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

(a) Use a value of 0.5 for lubricants.

Module	Energy					
Submodule	CO ₂ From Fuel Combustion by Source Categories (Tier 1)					
Worksheet	1-2 Step by step calculations					
Sheets	15 of 16 Other (not elsewhere specified)					
	Autogeneration					
Country	0					
Year	0					
	Step 1	Step 2		Step 3		
Other (Not Elsewhere Specified)	A Consumption	B Conversion Factor (TJ/unit)	C Consumption (TJ) C=(AxB)	D Carbon Emission Factor (t C/TJ)	E Carbon Content (t C) E=(Cx D)	F Carbon Content (Gg C) F=(E/1000)
Crude Oil	(a)		0.00		0.00	0.00
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			0.00		0.00	0.00
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			0.00		0.00	0.00
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
			0.00		0.00	0.00
			0.00		0.00	0.00
Total			0.00			
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			

(a) Include only consumption of crude that is burned, not crude oil which is refined into petroleum products.

[illegible]

(a) Use a value of 0.5 for lubricants.

MODULE	ENERGY					
SUBMODULE	CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET	1-2 STEP BY STEP CALCULATIONS					
SHEETS	15 OF 16 OTHER (NOT ELSEWHERE SPECIFIED)					
	PROCESS HEAT					
COUNTRY	0					
YEAR	0					
	STEP 1	STEP 2		STEP 3		
OTHER (NOT ELSEWHERE SPECIFIED)	A Consumption	B Conversion Factor (TJ/Unit)	C Consumption (TJ) C=(AxB)	D Carbon Emission Factor (t C/TJ)	E Carbon Content (t C) E=(Cx D)	F Carbon Content (Gg C) F=(E/1000)
Crude Oil	(a)		0.00		0.00	0.00
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			0.00		0.00	0.00
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			0.00		0.00	0.00
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
			0.00		0.00	0.00
			0.00		0.00	0.00
Total			0.00			
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			

(a) Include only consumption of crude that is burned, not crude oil which is refined into petroleum products.

[illegible]

(a) Use a value of 0.5 for lubricants.

MODULE			ENERGY					
SUBMODULE			CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET			1-2 OVERVIEW					
SHEET			1 OF 8					
COUNTRY			0					
YEAR			0					
			A	B	C	D	E	F
			Crude Oil	Orimulsion	Natural Gas Liquids	Gasoline	Jet Kerosene	Other Kerosene
FUEL CONSUMPTION (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)					0.00	0.00	
	Road					0.00		
	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)			0.00	0.00	0.00	0.00	0.00	0.00
Memo: International Marine Bunkers						0.00		
Memo: International Aviation Bunkers						0.00	0.00	
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)					0.00	0.00	
	Road					0.00		
	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)			0.00	0.00	0.00	0.00	0.00	0.00
Memo: International Marine Bunkers						0.00		
Memo: International Aviation Bunkers						0.00	0.00	

(a) Excludes International Bunkers.

Documentation box:

MODULE			ENERGY					
SUBMODULE			CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET			1-2 OVERVIEW					
SHEET			2 OF 8					
COUNTRY			0					
YEAR			0					
			G	H	I	J	K	L
			Shale Oil	Gas / Diesel Oil	Residual Fuel Oil	LPG	Ethane	Naphtha
FUEL CONSUMPTION (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			0.00		0.00		
	Railways			0.00	0.00			
	National Navigation ^(a)			0.00	0.00			
	Pipeline Transport							
Other Sectors	Commercial/Institutional			0.00	0.00	0.00		
	Residential			0.00	0.00	0.00		
	Agriculture / Forestry /	Stationary		0.00	0.00	0.00		
	Fishing	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	0.00	0.00	0.00	0.00	0.00
Memo: International Marine Bunkers				0.00	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			0.00		0.00		
	Railways			0.00	0.00			
	National Navigation ^(a)			0.00	0.00			
	Pipeline Transport							
Other Sectors	Commercial/Institutional			0.00	0.00	0.00		
	Residential			0.00	0.00	0.00		
	Agriculture / Forestry /	Stationary		0.00	0.00	0.00		
	Fishing	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	0.00	0.00	0.00	0.00	0.00
Memo: International Marine Bunkers				0.00	0.00			
Memo: International Aviation Bunkers								

(a) Excludes International Bunkers.



MODULE			ENERGY					
SUBMODULE			CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET			1-2 OVERVIEW					
SHEET			3 OF 8					
COUNTRY			0					
YEAR			0					
			M	N	O	P	Q	R
			Lubricants	Petroleum Coke	Refinery Gas	Anthracite	Coking Coal	Other Bituminous Coal
FUEL CONSUMPTION (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)							
	Road							
	Railways					0.00		0.00
	National Navigation ^(a)		0.00					
	Pipeline Transport							
Other Sectors	Commercial/Institutional					0.00		0.00
	Residential					0.00		0.00
	Agriculture / Forestry /	Stationary				0.00	0.00	0.00
	Fishing	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	0.00
Manufacturing Industries and Construction			0.00	0.00	0.00	0.00	0.00	0.00
Transport	Domestic Aviation ^(a)							
	Road							
	Railways					0.00		0.00
	National Navigation ^(a)		0.00					
	Pipeline Transport							
Other Sectors	Commercial/Institutional					0.00		0.00
	Residential					0.00		0.00
	Agriculture / Forestry /	Stationary				0.00	0.00	0.00
	Fishing	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								

(a) Excludes International Bunkers.

MODULE			ENERGY					
SUBMODULE			CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET			1-2 OVERVIEW					
SHEET			4 OF 8					
COUNTRY			0					
YEAR			0					
			S	T	U	V	W	X
			Sub-Bituminous Coal	Lignite	Oil Shale	Peat	Patent Fuel	Brown Coal Briquettes
FUEL CONSUMPTION (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					
	Pipeline Transport							
Other Sectors	Commercial/Institutional			0.00				0.00
	Residential		0.00	0.00		0.00	0.00	0.00
	Agriculture / Forestry /	Stationary		0.00			0.00	0.00
	Fishing	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								
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 /	Stationary		0.00			0.00	0.00
	Fishing	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								

(a) Excludes International Bunkers.

MODULE			ENERGY					
SUBMODULE			CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET			1-2 OVERVIEW					
SHEET			5 OF 8					
COUNTRY			0					
YEAR			0					
			Y	Z	AA	AB	AC	AD
			Coke Oven Coke	Gas Coke	Works Gas	Coke Oven Gas	Blast Furnace Gas	Natural Gas
FUEL CONSUMPTION (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)							
	Road							0.00
	Railways		0.00					
	National Navigation ^(a)							
	Pipeline Transport							0.00
Other Sectors	Commercial/Institutional		0.00		0.00	0.00		0.00
	Residential		0.00		0.00	0.00		0.00
	Agriculture / Forestry /	Stationary	0.00		0.00			0.00
	Fishing	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								
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	0.00	0.00
Transport	Domestic Aviation ^(a)							
	Road							0.00
	Railways		0.00					
	National Navigation ^(a)							
	Pipeline Transport							0.00
Other Sectors	Commercial/Institutional		0.00		0.00	0.00		0.00
	Residential		0.00		0.00	0.00		0.00
	Agriculture / Forestry /	Stationary	0.00		0.00			0.00
	Fishing	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								
Memo: International Aviation Bunkers								

(a) Excludes International Bunkers.

MODULE			ENERGY					
SUBMODULE			CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET			1-2 OVERVIEW					
SHEET			6 OF 8					
COUNTRY			0					
YEAR			0					
			AE Municipal Solid Waste	AF Industrial Waste	AG ^(b) (additional fuels)	AH ^(b)	AI ^(b)	AJ ^(b)
FUEL CONSUMPTION (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 /	Stationary			0.00	0.00		
	Fishing	Mobile			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)								
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 /	Stationary			0.00	0.00		
	Fishing	Mobile			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			

(a) Excludes International Bunkers.

(b) Other Fuels should be linked to Step by Step Calculations where applicable.

MODULE			ENERGY				
SUBMODULE			CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)				
WORKSHEET			1-2 OVERVIEW				
SHEET			7 OF 8				
COUNTRY			0				
YEAR			0				
			AK ^(b)	AL Total Liquid Fossil	AM Total Solid Fossil	AN Total Gaseous Fossil	AO Total Other Liquid Fuels ^(c)
FUEL CONSUMPTION (TJ)							
Energy Industries				0.00	0.00	0.00	
Manufacturing Industries and Construction				0.00	0.00	0.00	
Transport	Domestic Aviation ^(a)			0.00	0.00		
	Road			0.00	0.00	0.00	
	Railways			0.00	0.00		
	National Navigation ^(a)			0.00	0.00		
	Pipeline Transport			0.00	0.00	0.00	
Other Sectors	Commercial/Institutional			0.00	0.00	0.00	
	Residential			0.00	0.00	0.00	
	Agriculture / Forestry /	Stationary		0.00	0.00	0.00	
	Fishing	Mobile		0.00	0.00		
Other (not elsewhere specified)				0.00	0.00	0.00	
Total ^(a)			0.00	0.00	0.00	0.00	0.00
Memo: International Marine Bunkers				0.00	0.00		
Memo: International Aviation Bunkers				0.00	0.00		
CO ₂ EMISSIONS (Gg)							
Energy Industries				0.00	0.00	0.00	
Manufacturing Industries and Construction				0.00	0.00	0.00	
Transport	Domestic Aviation ^(a)			0.00	0.00		
	Road			0.00	0.00	0.00	
	Railways			0.00	0.00		
	National Navigation ^(a)			0.00	0.00		
	Pipeline Transport			0.00	0.00	0.00	
Other Sectors	Commercial/Institutional			0.00	0.00	0.00	
	Residential			0.00	0.00	0.00	
	Agriculture / Forestry /	Stationary		0.00	0.00	0.00	
	Fishing	Mobile		0.00	0.00		
Other (not elsewhere specified)				0.00	0.00	0.00	
Total ^(a)			0.00	0.00	0.00	0.00	0.00
Memo: International Marine Bunkers				0.00	0.00		
Memo: International Aviation Bunkers				0.00	0.00		

(a) Excludes International Bunkers.

(b) Other Fuels should be linked to Step by Step Calculations where applicable.

(c) Please include Fuels from columns AG to AK where applicable.

(d) Excluding Biomass.

MODULE						
SUBMODULE						
WORKSHEET						
SHEET						
COUNTRY						
YEAR						
				AP Total Other Solid Fuels ^(c)	AQ Total Other Gaseous Fuels ^(c)	AR Total ^(d)
FUEL CONSUMPTION (TJ)						
Energy Industries						0.00
Manufacturing Industries and Construction						0.00
Transport	Domestic Aviation ^(a)					0.00
	Road					0.00
	Railways					0.00
	National Navigation ^(a)					0.00
	Pipeline Transport					0.00
Other Sectors	Commercial/Institutional					0.00
	Residential					0.00
	Agriculture / Forestry / Fishing	Stationary				0.00
		Mobile				0.00
Other (not elsewhere specified)						0.00
Total ^(a)				0.00	0.00	0.00
Memo: International Marine Bunkers						0.00
Memo: International Aviation Bunkers						0.00
CO2 EMISSIONS (Gg)						
Energy Industries						0.00
Manufacturing Industries and Construction						0.00
Transport	Domestic Aviation ^(a)					0.00
	Road					0.00
	Railways					0.00
	National Navigation ^(a)					0.00
	Pipeline Transport					0.00
Other Sectors	Commercial/Institutional					0.00
	Residential					0.00
	Agriculture / Forestry / Fishing	Stationary				0.00
		Mobile				0.00
Other (not elsewhere specified)						0.00
Total ^(a)				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			8 OF 8					
COUNTRY			0					
YEAR			0					
			AS Wood / Wood Waste	AT Charcoal	AU Other Solid Biomass	AV Liquid Biomass	AW Gaseous Biomass	AX Total Biomass
FUEL CONSUMPTION (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					(b) 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		0.00	0.00	0.00	0.00	0.00	0.00
	Agriculture / Forestry /	Stationary	0.00	0.00	0.00	0.00	0.00	0.00
	Fishing	Mobile				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
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					(b) 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		0.00	0.00	0.00	0.00	0.00	0.00
	Agriculture / Forestry /	Stationary	0.00	0.00	0.00	0.00	0.00	0.00
	Fishing	Mobile				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

(a) Excludes International Bunkers.

(b) Provisionally linked to Road Transport. Change if not applicable.

This spreadsheet contains sheet 1 of Worksheet 1-3, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY					
SUBMODULE		NON-CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET		1-3					
SHEETS		1 OF 3					
COUNTRY		0					
YEAR		0					
		STEP 1					
ACTIVITY		A Fuel Consumption (TJ)					
		A1	A2	A3	A4	A5	A6
		Coal	Natural Gas	Oil	Wood / Wood Waste	Charcoal	Other Biomass and Wastes
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		0.00			
	National Navigation ^(a)	0.00		0.00			
	Other Sectors	0.00	0.00	0.00	0.00	0.00	0.00
Other Sectors	Commercial/Institutional	0.00	0.00	0.00	0.00	0.00	0.00
	Residential	0.00	0.00	0.00	0.00	0.00	0.00
	Agriculture / Forestry / Fishing	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)		0.00	0.00	0.00	0.00	0.00	0.00
Memo: International Marine Bunkers		0.00		0.00			
Memo: International Aviation Bunkers				0.00			

(a) Excludes international bunkers.

Documentation box: Parties are encouraged to provide relevant information used in the calculation and on data source

es in this documentation box.

This spreadsheet contains sheets 2 of Worksheet 1-3 (CH₄), in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY					
SUBMODULE		NON-CO₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET		1-3					
SHEETS		2 OF 3 CH₄					
COUNTRY		0					
YEAR		0					
		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							
Manufacturing Industries and Construction							
Transport	Domestic Aviation ^(a)						
				Gasoline	Diesel		
	Road						
	Railways						
	National Navigation ^(a)						
Other Sectors	Commercial/Institutional						
	Residential						
	Agriculture / Forestry / Fishing						
	Stationary						
	Mobile						
Other (not elsewhere specified)							
Total^(a)							
Memo: International Marine Bunkers							
Memo: International Aviation Bunkers							

(a) Excludes international bunkers.

This spreadsheet contains sheets 3 of Worksheet 1-3 (CH₄), in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY						
SUBMODULE		NON-CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)						
WORKSHEET		1-3						
SHEETS		3 OF 3 CH ₄						
COUNTRY		0						
YEAR		0						
		STEP 3						
ACTIVITY		C						D
		Emissions by Fuel (kg)						Total Emissions (Gg)
		C=(AxB)						D= sum (C1..C6) / 1 000 000
		C1	C2	C3	C4	C5	C6	
		Coal	Natural Gas	Oil	Wood / Wood Waste	Charcoal	Other Biomass and Wastes	
Energy Industries		0.00	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			0.00
	Road			Gasoline	Diesel			
			0.00	0.00	0.00			0.00
	Railways	0.00		0.00				0.00
	National Navigation ^(a)	0.00		0.00				0.00
Other Sectors	Commercial/Institutional	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Residential	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Agriculture / Forestry /	Stationary	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)		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Memo: International Marine Bunkers		0.00		0.00				0.00
Memo: International Aviation Bunkers				0.00				0.00

(a) Excludes international bunkers.

This spreadsheet contains sheets 2 of Worksheet 1-3 (N₂O), in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY					
SUBMODULE		NON-CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET		1-3					
SHEETS		2 OF 3 N ₂ O					
COUNTRY		0					
YEAR		0					
		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							
Manufacturing Industries and Construction							
Transport	Domestic Aviation ^(a)						
	Road			Gasoline Diesel			
	Railways						
	National Navigation ^(a)						
Other Sectors	Commercial/Institutional						
	Residential						
	Agriculture / Forestry / Stationary						
	Fishing Mobile						
Other (not elsewhere specified)							
Total ^(a)							
Memo: International Marine Bunkers							
Memo: International Aviation Bunkers							

(a) Excludes international bunkers.

This spreadsheet contains sheets 3 of Worksheet 1-3 (N₂O), in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY						
SUBMODULE		NON-CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)						
WORKSHEET		1-3						
SHEETS		3 OF 3 N ₂ O						
COUNTRY		0						
YEAR		0						
		STEP 3						
ACTIVITY		C						D
		Emissions by Fuel (kg)						Total Emissions (Gg)
		C=(AxB)						D= sum (C1..C6) / 1 000 000
		C1	C2	C3	C4	C5	C6	
		Coal	Natural Gas	Oil	Wood / Wood Waste	Charcoal	Other Biomass and Wastes	
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			0.00
	Road		0.00	Gasoline	Diesel			0.00
	Railways	0.00		0.00				0.00
	National Navigation ^(a)	0.00		0.00				0.00
Other Sectors	Commercial/Institutional	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Residential	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Agriculture / Forestry / Stationary	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fishing Mobile		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)		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Memo: International Marine Bunkers		0.00		0.00				0.00
Memo: International Aviation Bunkers				0.00				0.00

(a) Excludes international bunkers.

MODULE		ENERGY						ENERGY
SUBMODULE		NON-CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)						NON-CO ₂
WORKSHEET		1-3						1-3
SHEETS		2 OF 3 NO _x						3 OF 3 NO _x
COUNTRY		0						0
YEAR		0						0
		STEP 2						
		B						
		Emission Factors (kg/TJ)						
ACTIVITY		B1	B2	B3	B4	B5	B6	C1
		Coal	Natural Gas	Oil	Wood / Wood Waste	Charcoal	Other Biomass and Wastes	Coal
Energy Industries								0.00
Manufacturing Industries and Construction								
								0.00
Transport	Domestic Aviation ^(a)							
	Road			Gasoline	Diesel			
	Railways							0.00
	National Navigation ^(a)							0.00
Other Sectors	Commercial/Institutional							0.00
	Residential							0.00
	Agriculture / Forestry / Stationary							0.00
	Fishing / Mobile							
Other (not elsewhere specified)								0.00
Total ^(a)								0.00
Memo: International Marine Bunkers								0.00
Memo: International Aviation Bunkers								

(a) Excludes international bunkers.

(a) Exclude

heet contains sheets 3 of Worksheet 1-3 (NO_x), in accordance with the
5 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE							
SUBMODULE		FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET							
SHEETS		X					
COUNTRY							
YEAR							
		STEP 3					
ACTIVITY		C					D
		Emissions by Fuel (kg)					Total Emissions (Gg)
		C=(AxB)					D= sum (C1..C6) / 1 000 000
		C2	C3	C4	C5	C6	
		Natural Gas	Oil	Wood / Wood Waste	Charcoal	Other Biomass and Wastes	
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	0.00
Transport	Domestic Aviation ^(a)		0.00				0.00
	Road		Gasoline	Diesel			
		0.00	0.00	0.00			0.00
	Railways		0.00				0.00
	National Navigation ^(a)		0.00				0.00
Other Sectors	Commercial/Institutional	0.00	0.00	0.00	0.00	0.00	0.00
	Residential	0.00	0.00	0.00	0.00	0.00	0.00
	Agriculture / Forestry /	Stationary	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
Total ^(a)		0.00	0.00	0.00	0.00	0.00	0.00
Memo: International Marine Bunkers			0.00				0.00
Memo: International Aviation Bunkers			0.00				0.00

s international bunkers.

This spreadsheet contains sheets 2 of Worksheet 1-3 (CO), in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY						
SUBMODULE		NON-CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)						
WORKSHEET		1-3						
SHEETS		2 OF 3 CO						
COUNTRY		0						
YEAR		0						
		STEP 2						
ACTIVITY		B						
		Emission Factors (kg/TJ)						
		B1	B2	B3		B4	B5	B6
		Coal	Natural Gas	Oil		Wood / Wood Waste	Charcoal	Other Biomass and Wastes
Energy Industries								
Manufacturing Industries and Construction								
Transport	Domestic Aviation ^(a)							
	Road			Gasoline	Diesel			
	Railways							
	National Navigation ^(a)							
Other Sectors	Commercial/Institutional							
	Residential							
	Agriculture / Forestry /	Stationary						
		Fishing	Mobile					
	Other (not elsewhere specified)							
Total ^(a)								
Memo: International Marine Bunkers								
Memo: International Aviation Bunkers								

(a) Excludes international bunkers.

This spreadsheet contains sheets 3 of Worksheet 1-3 (CO), in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY						
SUBMODULE		NON-CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)						
WORKSHEET		1-3						
SHEETS		3 OF 3 CO						
COUNTRY		0						
YEAR		0						
		STEP 3						
ACTIVITY		C						D
		Emissions by Fuel (kg)						Total Emissions (Gg)
		C=(AxB)						D= sum (C1..C6) / 1 000 000
		C1	C2	C3	C4	C5	C6	
		Coal	Natural Gas	Oil	Wood / Wood Waste	Charcoal	Other Biomass and Wastes	
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
				Gasoline	Diesel			
	Road		0.00	0.00	0.00			0.00
	Railways	0.00			0.00			0.00
	National Navigation ^(a)	0.00			0.00			0.00
Other Sectors	Commercial/Institutional	0.00	0.00		0.00	0.00	0.00	0.00
	Residential	0.00	0.00		0.00	0.00	0.00	0.00
	Agriculture / Forestry /	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Stationary							
	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			0.00			0.00
Memo: International Aviation Bunkers					0.00			0.00

(a) Excludes international bunkers.

This spreadsheet contains sheets 2 of Worksheet 1-3 (NMVOC), in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY					
SUBMODULE		NON-CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET		1-3					
SHEETS		2 OF 3 NMVOC					
COUNTRY		0					
YEAR		0					
		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							
Manufacturing Industries and Construction							
Transport	Domestic Aviation ^(a)						
	Road			Gasoline	Diesel		
	Railways						
	National Navigation ^(a)						
	Commercial/Institutional						
Other Sectors	Residential						
	Agriculture / Forestry / Fishing						
	Stationary						
	Mobile						
Other (not elsewhere specified)							
Total ^(a)							
Memo: International Marine Bunkers							
Memo: International Aviation Bunkers							

(a) Excludes international bunkers.

This spreadsheet contains sheets 3 of Worksheet 1-3 (NMVOC), in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE			ENERGY						
SUBMODULE			NON-CO ₂ FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)						
WORKSHEET			1-3						
SHEETS			3 OF 3 NMVOC						
COUNTRY			0						
YEAR			0						
			STEP 3						
ACTIVITY			C					D	
			Emissions by Fuel (kg)					Total Emissions (Gg)	
			C=(AxB)					D= sum (C1..C6) / 1 000 000	
			C1	C2	C3	C4	C5		C6
			Coal	Natural Gas	Oil	Wood / Wood Waste	Charcoal	Other Biomass and Wastes	
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			0.00
	Road			Gasoline	Diesel				
			0.00	0.00	0.00				0.00
	Railways		0.00		0.00				0.00
	National Navigation ^(a)		0.00		0.00				0.00
Other Sectors	Commercial/Institutional		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Residential		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Agriculture / Forestry / Fishing	Stationary	0.00	0.00	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	0.00
Total ^(a)			0.00	0.00	0.00	0.00	0.00	0.00	0.00
Memo: International Marine Bunkers			0.00		0.00				0.00
Memo: International Aviation Bunkers					0.00				0.00

(a) Excludes international bunkers.

This spreadsheet contains Worksheet 1-4, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY						
SUBMODULE		SO ₂ EMISSIONS FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)						
WORKSHEET		1-4						
SHEETS		1 OF 5: ENERGY INDUSTRIES						
COUNTRY		0						
YEAR		0						
		STEP 1	STEP 2					STEP 3
		A Fuel Consumption (TJ)	B Sulphur content of fuel ^(a) (%)	C Sulphur retention in ash (%)	D Abatement efficiency (%)	E Net Calorific Value ^(d) (TJ/kt)	F SO ₂ Emission Factor ^(a) (kg/TJ)	G Emissions (t)
FUEL TYPE							$F = 2 \times (B/100) \times (1/E) \times 1\,000\,000 \times ((100-C)/100) \times ((100-D)/100)$	$G = (A \times F) / 1000$
Coal	low						0.00	0.00
	medium						0.00	0.00
	high						0.00	0.00
Heavy Fuel Oil	low						0.00	0.00
	medium						0.00	0.00
	high						0.00	0.00
Light Fuel Oil / Diesel	low						0.00	0.00
	high						0.00	0.00
Diesel (road)							0.00	0.00
Gasoline (road)							0.00	0.00
Jet Kerosene							0.00	0.00
Oil Shale							0.00	0.00
Other Oil							0.00	0.00
Natural Gas ^(a)							0.00	0.00
Municipal Waste							0.00	0.00
Industrial Waste							0.00	0.00
Black Liquor							0.00	0.00
Fuelwood							0.00	0.00
Other Biomass							0.00	0.00
Total		0						0.00

(a) The sulphur content of natural gas is expressed in gram per cubic meter and the net calorific value should be expressed in kilo Joules per cubic meter. The sulphur content for natural gas (in column B) will not be divided by 100 when calculating the emission factor in column F.

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.

This spreadsheet contains Worksheet 1-4, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY						
SUBMODULE		SO ₂ EMISSIONS FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)						
WORKSHEET		1-4						
SHEETS		2 OF 5: MANUFACTURING INDUSTRIES AND CONSTRUCTION						
COUNTRY		0						
YEAR		0						
		STEP 1	STEP 2					STEP 3
		A Fuel Consumption (TJ)	B Sulphur content of fuel ^(a) (%)	C Sulphur retention in ash (%)	D Abatement efficiency (%)	E Net Calorific Value ^(d) (TJ/kt)	F SO ₂ Emission Factor ^(a) (kg/TJ)	G Emissions (t)
FUEL TYPE							$F = 2 \times (B/100) \times (1/E) \times 1\,000\,000 \times ((100-C)/100) \times ((100-D)/100)$	$G = (A \times F) / 1000$
Coal	low						0.00	0.00
	medium						0.00	0.00
	high						0.00	0.00
Heavy Fuel Oil	low						0.00	0.00
	medium						0.00	0.00
	high						0.00	0.00
Light Fuel Oil / Diesel	low						0.00	0.00
	high						0.00	0.00
Diesel (road)							0.00	0.00
Gasoline (road)							0.00	0.00
Jet Kerosene							0.00	0.00
Oil Shale							0.00	0.00
Other Oil							0.00	0.00
Natural Gas ^(a)							0.00	0.00
Municipal Waste							0.00	0.00
Industrial Waste							0.00	0.00
Black Liquor							0.00	0.00
Fuelwood							0.00	0.00
Other Biomass							0.00	0.00
Total		0						0.00

(a) The sulphur content of natural gas is expressed in gram per cubic meter and the net calorific value should be expressed in kilo Joules per cubic meter. The sulphur content for natural gas (in column B) will not be divided by 100 when calculating the emission factor in column F.

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.

This spreadsheet contains Worksheet 1-4, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY						
SUBMODULE		SO₂ EMISSIONS FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)						
WORKSHEET		1-4						
SHEETS		3 OF 5: TRANSPORT						
COUNTRY		0						
YEAR		0						
		STEP 1	STEP 2					STEP 3
		A Fuel Consumption (TJ)	B Sulphur content of fuel ^(a) (%)	C Sulphur retention in ash (%)	D Abatement efficiency (%)	E Net Calorific Value ^(d) (TJ/kt)	F SO ₂ Emission Factor ^(a) (kg/TJ)	G Emissions (t)
FUEL TYPE							$F = 2 \times (B/100) \times (1/E) \times 1\,000\,000 \times ((100-C)/100) \times ((100-D)/100)$	$G = (A \times F) / 1000$
Coal	low						0.00	0.00
	medium						0.00	0.00
	high						0.00	0.00
Heavy Fuel Oil	low						0.00	0.00
	medium						0.00	0.00
	high						0.00	0.00
Light Fuel Oil / Diesel	low						0.00	0.00
	high						0.00	0.00
Diesel (road)							0.00	0.00
Gasoline (road)							0.00	0.00
Jet Kerosene							0.00	0.00
Oil Shale							0.00	0.00
Other Oil							0.00	0.00
Natural Gas ^(a)							0.00	0.00
Municipal Waste							0.00	0.00
Industrial Waste							0.00	0.00
Black Liquor							0.00	0.00
Fuelwood							0.00	0.00
Other Biomass							0.00	0.00
Total		0						0.00
Memo: Fuels for International Marine Bunkers							0.00	0.00
Memo: Fuels for International Aviation Bunkers							0.00	0.00

(a) The sulphur content of natural gas is expressed in gram per cubic meter and the net calorific value should be expressed in kilo Joules per cubic meter. The sulphur content for natural gas (in column B) will not be divided by 100 when calculating the emission factor in column F.

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.



This spreadsheet contains Worksheet 1-4, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY					
SUBMODULE		SO ₂ EMISSIONS FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)					
WORKSHEET		1-4					
SHEETS		4 OF 5: OTHER SECTORS (COMMERCIAL/INSTITUTIONAL, RESIDENTIAL, AGRICULTURE/ FOR					
COUNTRY		0					
YEAR		0					
		STEP 1	STEP 2				
		A Fuel Consumption (TJ)	B Sulphur content of fuel ^(a) (%)	C Sulphur retention in ash (%)	D Abatement efficiency (%)	E Net Calorific Value ^(d) (TJ/kt)	F SO ₂ Emission Factor ^(a) (kg/TJ)
FUEL TYPE							$F = 2 \times (B/100) \times (1/E) \times 1\,000\,000 \times ((100-C)/100) \times ((100-D)/100)$
Coal	low						0.00
	medium						0.00
	high						0.00
Heavy Fuel Oil	low						0.00
	medium						0.00
	high						0.00
Light Fuel Oil / Diesel	low						0.00
	high						0.00
Diesel (road)							0.00
Gasoline (road)							0.00
Jet Kerosene							0.00
Oil Shale							0.00
Other Oil							0.00
Natural Gas ^(a)							0.00
Municipal Waste							0.00
Industrial Waste							0.00
Black Liquor							0.00
Fuelwood							0.00
Other Biomass							0.00
Total		0					

(a) The sulphur content of natural gas is expressed in gram per cubic meter and the net calorific value should be expressed in kilo Joules per cubic meter. The sulphur content for natural gas (in column B) will not be divided by 100 when calculating the emission factor in column F.

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.

This spreadsheet contains Worksheet 1-4, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY						
SUBMODULE		SO ₂ EMISSIONS FROM FUEL COMBUSTION BY SOURCE CATEGORIES (TIER 1)						
WORKSHEET		1-4						
SHEETS		5 OF 5: OTHER (NOT ELSEWHERE SPECIFIED)						
COUNTRY		0						
YEAR		0						
		STEP 1	STEP 2					STEP 3
		A Fuel Consumption (TJ)	B Sulphur content of fuel ^(a) (%)	C Sulphur retention in ash (%)	D Abatement efficiency (%)	E Net Calorific Value ^(d) (TJ/kt)	F SO ₂ Emission Factor ^(a) (kg/TJ)	G Emissions (t)
FUEL TYPE							$F = 2 \times (B/100) \times (1/E) \times 1\,000\,000 \times ((100-C)/100) \times ((100-D)/100)$	$G = (A \times F) / 1000$
Coal	low						0.00	0.00
	medium						0.00	0.00
	high						0.00	0.00
Heavy Fuel Oil	low						0.00	0.00
	medium						0.00	0.00
	high						0.00	0.00
Light Fuel Oil / Diesel	low						0.00	0.00
	high						0.00	0.00
Diesel (road)							0.00	0.00
Gasoline (road)							0.00	0.00
Jet Kerosene							0.00	0.00
Oil Shale							0.00	0.00
Other Oil							0.00	0.00
Natural Gas ^(a)							0.00	0.00
Municipal Waste							0.00	0.00
Industrial Waste							0.00	0.00
Black Liquor							0.00	0.00
Fuelwood							0.00	0.00
Other Biomass							0.00	0.00
Total		0						0.00

(a) The sulphur content of natural gas is expressed in gram per cubic meter and the net calorific value should be expressed in kilo Joules per cubic meter. The sulphur content for natural gas (in column B) will not be divided by 100 when calculating the emission factor in column F.

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.

This spreadsheet contains sheet 1 of Worksheet 1-5, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY		
SUBMODULE	EMISSIONS FROM AIRCRAFT (TIER 2)		
WORKSHEET	1-5		
SHEETS	1 OF 3 FUEL CONSUMPTION FOR DOMESTIC AND INTERNATIONAL AVIATION		
COUNTRY	0		
YEAR	0		
	STEP 1		
	A Total Amount of Fuel Sold for All Aviation (kt)	B Total Amount of Fuel Sold for Domestic Aviation (kt)	C Total Amount of Fuel Sold for International Aviation (kt)
			C=(A-B)
Fuel Sold			0.00

Documentation box: Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.



MODULE	ENERGY					
SUBMODULE	EMISSIONS FROM AIRCRAFT (TIER 2)					
WORKSHEET	1-5					
SHEETS	2 OF 3 FUEL CONSUMPTION FOR LTO AND CRUISE ACTIVITIES					
COUNTRY	0					
YEAR	0					
	STEP 2			STEP 3		
	D Total Number of LTO's per Aircraft type	E Fuel Consumption per LTO (t/LTO)	F Fuel Consumption for LTO Activities (t)	G Total Fuel Sold (t)	H Total Fuel Consumption for Cruise Activities (t)	I Fuel Consumption for Cruise Activities (t)
DOMESTIC AIRCRAFT TYPE			F=DxE		H=G-F	I=Hx(D _a /D _{TOTALa})
a ₁			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
.			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
a _n			0.00			0.00
TOTAL a	0.00	TOTAL a	0.00	G=Bx1000 0.00	0.00	0.00
INTERNATIONAL AIRCRAFT TYPE						I=Hx(D _b /D _{TOTALb})
b ₁			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
.			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
b _n			0.00			0.00
TOTAL b	0.00	TOTAL b	0.00	G=Cx1000 0.00	0.00	0.00

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.

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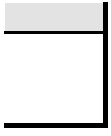
This spreadsheet contains sheet 3 (CO₂) of Worksheet 1-5, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY				
SUBMODULE	EMISSIONS FROM AIRCRAFT (TIER 2)				
WORKSHEET	1-5				
SHEETS	3 OF 3 EMISSIONS OF CO ₂				
COUNTRY	0				
YEAR	0				
	STEP 4				
	J Emission Factor per LTO (kg/LTO)	K Emissions from LTO Activities (t)	L Emission Factor per Fuel Consumption for Cruise Activities (kg/t)	M Emissions from Cruise Activities (t)	N Total Emissions from Aircraft (Gg)
DOMESTIC AIRCRAFT TYPE		$K=(D \times J)/1000$		$M=(L \times L)/1000$	$N=(K+M)/1000$
a ₁		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		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	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
a _n		0.00		0.00	0.00
	TOTAL a	0.00	TOTAL a	0.00	0.00
INTERNATIONAL AIRCRAFT TYPE					
b ₁		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		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	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
b _n		0.00		0.00	0.00
	TOTAL b	0.00	TOTAL b	0.00	0.00

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.





This spreadsheet contains sheet 3 (CH₄) of Worksheet 1-5, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY				
SUBMODULE	EMISSIONS FROM AIRCRAFT (TIER 2)				
WORKSHEET	1-5				
SHEETS	3 OF 3 EMISSIONS OF CH ₄				
COUNTRY	0				
YEAR	0				
	STEP 4				
	J Emission Factor per LTO (kg/LTO)	K Emissions from LTO Activities (t)	L Emission Factor per Fuel Consumption for Cruise Activities (kg/t)	M Emissions from Cruise Activities (t)	N Total Emissions from Aircraft (Gg)
DOMESTIC AIRCRAFT TYPE		$K=(D \times J)/1000$		$M=(I \times L)/1000$	$N=(K+M)/1000$
a ₁		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		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	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
a _n		0.00		0.00	0.00
	TOTAL a	0.00	TOTAL a	0.00	0.00
INTERNATIONAL AIRCRAFT TYPE					
b ₁		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		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	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
b _n		0.00		0.00	0.00
	TOTAL b	0.00	TOTAL b	0.00	0.00

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.

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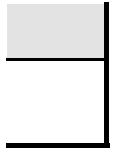
This spreadsheet contains sheet 3 (N₂O) of Worksheet 1-5, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY				
SUBMODULE	EMISSIONS FROM AIRCRAFT (TIER 2)				
WORKSHEET	1-5				
SHEETS	3 OF 3 EMISSIONS OF N ₂ O				
COUNTRY	0				
YEAR	0				
	STEP 4				
	J Emission Factor per LTO (kg/LTO)	K Emissions from LTO Activities (t)	L Emission Factor per Fuel Consumption for Cruise Activities (kg/t)	M Emissions from Cruise Activities (t)	N Total Emissions from Aircraft (Gg)
DOMESTIC AIRCRAFT TYPE		$K=(D \times J)/1000$		$M=(I \times L)/1000$	$N=(K+M)/1000$
a ₁		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		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	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
a _n		0.00		0.00	0.00
	TOTAL a	0.00	TOTAL a	0.00	0.00
INTERNATIONAL AIRCRAFT TYPE					
b ₁		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		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	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
b _n		0.00		0.00	0.00
	TOTAL b	0.00	TOTAL b	0.00	0.00

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.





This spreadsheet contains sheet 3 (NO_x) of Worksheet 1-5, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY				
SUBMODULE	EMISSIONS FROM AIRCRAFT (TIER 2)				
WORKSHEET	1-5				
SHEETS	3 OF 3 EMISSIONS OF NO _x				
COUNTRY	0				
YEAR	0				
	STEP 4				
	J Emission Factor per LTO (kg/LTO)	K Emissions from LTO Activities (t)	L Emission Factor per Fuel Consumption for Cruise Activities (kg/t)	M Emissions from Cruise Activities (t)	N Total Emissions from Aircraft (Gg)
DOMESTIC AIRCRAFT TYPE		$K=(D \times J)/1000$		$M=(I \times L)/1000$	$N=(K+M)/1000$
a ₁		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		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	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
a _n		0.00		0.00	0.00
	TOTAL a	0.00	TOTAL a	0.00	0.00
INTERNATIONAL AIRCRAFT TYPE					
b ₁		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		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	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
b _n		0.00		0.00	0.00
	TOTAL b	0.00	TOTAL b	0.00	0.00

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.



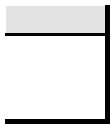
This spreadsheet contains sheet 3 (CO) of Worksheet 1-5, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY				
SUBMODULE	EMISSIONS FROM AIRCRAFT (TIER 2)				
WORKSHEET	1-5				
SHEETS	3 OF 3 EMISSIONS OF CO				
COUNTRY	0				
YEAR	0				
	STEP 4				
	J Emission Factor per LTO (kg/LTO)	K Emissions from LTO Activities (t)	L Emission Factor per Fuel Consumption for Cruise Activities (kg/t)	M Emissions from Cruise Activities (t)	N Total Emissions from Aircraft (Gg)
DOMESTIC AIRCRAFT TYPE		$K=(D \times J)/1000$		$M=(I \times L)/1000$	$N=(K+M)/1000$
a ₁		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		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	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
a _n		0.00		0.00	0.00
	TOTAL a	0.00	TOTAL a	0.00	0.00
INTERNATIONAL AIRCRAFT TYPE					
b ₁		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		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	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
b _n		0.00		0.00	0.00
	TOTAL b	0.00	TOTAL b	0.00	0.00

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.





This spreadsheet contains sheet 3 (NMVOC) of Worksheet 1-5, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY				
SUBMODULE	EMISSIONS FROM AIRCRAFT (TIER 2)				
WORKSHEET	1-5				
SHEETS	3 OF 3 EMISSIONS OF NMVOC				
COUNTRY	0				
YEAR	0				
	STEP 4				
	J Emission Factor per LTO (kg/LTO)	K Emissions from LTO Activities (t)	L Emission Factor per Fuel Consumption for Cruise Activities (kg/t)	M Emissions from Cruise Activities (t)	N Total Emissions from Aircraft (Gg)
DOMESTIC AIRCRAFT TYPE		$K=(D \times J)/1000$		$M=(I \times L)/1000$	$N=(K+M)/1000$
a ₁		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		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	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
a _n		0.00		0.00	0.00
	TOTAL a	0.00	TOTAL a	0.00	0.00
INTERNATIONAL AIRCRAFT TYPE					
b ₁		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		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	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
b _n		0.00		0.00	0.00
	TOTAL b	0.00	TOTAL b	0.00	0.00

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.



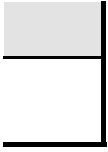
This spreadsheet contains sheet 3 (SO₂) of Worksheet 1-5, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY				
SUBMODULE	EMISSIONS FROM AIRCRAFT (TIER 2)				
WORKSHEET	1-5				
SHEETS	3 OF 3 EMISSIONS OF SO ₂				
COUNTRY	0				
YEAR	0				
	STEP 4				
	J Emission Factor per LTO (kg/LTO)	K Emissions from LTO Activities (t)	L Emission Factor per Fuel Consumption for Cruise Activities (kg/t)	M Emissions from Cruise Activities (t)	N Total Emissions from Aircraft (Gg)
DOMESTIC AIRCRAFT TYPE		$K=(D \times J)/1000$		$M=(I \times L)/1000$	$N=(K+M)/1000$
a ₁		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		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	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
a _n		0.00		0.00	0.00
	TOTAL a	0.00	TOTAL a	0.00	0.00
INTERNATIONAL AIRCRAFT TYPE					
b ₁		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		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	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
b _n		0.00		0.00	0.00
	TOTAL b	0.00	TOTAL b	0.00	0.00

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.





This spreadsheet contains Worksheet 1-6, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY				
SUBMODULE		METHANE EMISSIONS FROM COAL MINING AND HANDLING				
WORKSHEET		1-6				
SHEETS		1 OF 1				
COUNTRY		0				
YEAR		0				
		STEP 1				
		A Amount of Coal Produced (millions t)	B Emission Factor (m ³ CH ₄ / t)	C Methane Generated (millions m ³)	D Methane recovered or flared (millions m ³)	E Methane Emissions (millions m ³)
				C=(AxB)		E=C-D
Underground Mines	Mining			0.00		0.00
	Post-Mining			0.00		0.00
Surface Mines	Mining			0.00		0.00
	Post-Mining			0.00		0.00

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.

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STEP 2	
F Conversion Factors (0.67 Gg CH ₄ /million m ³)	G Methane Emissions (Gg CH ₄)
	G=(ExF)
0.67	0.00
0.67	0.00
0.67	0.00
0.67	0.00
Total	0.00

This spreadsheet contains Worksheet 1-7, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

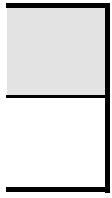
PLEASE ONLY FILL EITHER SHEET 1-7s1 OR SHEET 1-7s2

MODULE		ENERGY		
SUBMODULE		METHANE EMISSIONS FROM OIL AND GAS ACTIVITIES (TIER 1)		
WORKSHEET		1-7		
SHEETS		1 OF 1		
COUNTRY		0		
YEAR		0		
Category	A Activity	B Emission Factor	C CH ₄ Emissions (Kg CH ₄) C = (A x B)	D Emissions CH ₄ (Gg CH ₄) D = (C / 1 000 000)
OIL				
Exploration (Optional if data is locally available) ^(a)	number of wells drilled	Kg CH ₄ / well drilled	0.00	0.00
Production ^(b)	PJ oil produced	Kg CH ₄ / PJ	0.00	0.00
Transport	PJ oil loaded in tankers	Kg CH ₄ / PJ	0.00	0.00
Refining	PJ oil refined	Kg CH ₄ / PJ refined	0.00	0.00
Storage	PJ oil refined	Kg CH ₄ / PJ refined	0.00	0.00
	TOTAL CH₄ FROM OIL			0.00
GAS				
Production ^(c) / Processing	PJ gas consumed	Kg CH ₄ / PJ	0.00	0.00
Transmission and Distribution	PJ gas consumed	Kg CH ₄ / PJ	0.00	0.00
Other Leakage	PJ gas consumed			
	- non-residential gas consumed		0.00	0.00
	- Residential gas consumed		0.00	0.00
	TOTAL CH₄ FROM GAS			0.00
VENTING AND FLARING FROM OIL/GAS PRODUCTION ^(d)	PJ oil and gas produced	Kg CH ₄ / PJ		
	- Oil		0.00	0.00
	- Gas		0.00	0.00
	- Combined		0.00	0.00
	TOTAL CH₄ FROM OIL AND GAS			0.00

- (a) Emission Factors are not provided.
- (b) If using default emission factors these categories will include emissions from production other than venting and flaring.
- (c) If using default emission factors, emissions from venting and flaring from all oil and production should be accounted for here.

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.



PLEASE ONLY FILL EITHER SHEET 1-7s1 OR SHEET 1-7s2

MODULE		ENERGY
SUBMODULE		METHANE EMISSIONS FROM OIL AND GAS
WORKSHEET		1-7 (GPG2000)
SHEETS		1 OF 1
COUNTRY		0
YEAR		0
Category	Subcategory	A (Unit of Measure) Activity
OIL		
Wells	Drilling	number of wells drilled
Wells	Testing	number of wells drilled
Wells	Servicing	number of producing and capable wells
Production ^(a)	Conventional Oil	10^3 m^3 of conventional oil produced
Production ^(a)	Heavy Oil	10^3 m^3 of heavy oil produced
Production ^(a)	Crude Bitumen	10^3 m^3 of crude bitumen produced
Production ^(a)	Synthetic Crude (from oilsands)	10^3 m^3 of synthetic crude produced
Production ^(a)	Synthetic Crude (from oil shale)	10^3 m^3 of synthetic crude produced
Transport	Pipelines	10^3 m^3 oil transported by pipelines
Refining		PJ oil refined
Storage		PJ oil refined
GAS		
Production ^(a)		10^6 m^3 gas production
Gas Processing	Sweet Gas Plants	10^6 m^3 gas receipts
Gas Processing	Sour Gas Plants	10^6 m^3 gas receipts

Gas Processing	Deep-cut extraction plants	10^6 m^3 gas receipts
Gas Transmission		km of transmission pipeline
Gas Storage		10^6 m^3 gas withdrawals
Gas Distribution		km of distribution mains
Natural Gas Liquids Transport		10^3 m^3 Condensates and Pentanes Plus
VENTING AND FLARING FROM OIL/GAS PRODUCTION ^(b)		
Gas Production	Flaring	10^6 m^3 gas production
Gas Processing	Sweet Gas Plants - Flaring	10^6 m^3 gas receipts
Gas Processing	Sour Gas Plants - Flaring	10^6 m^3 gas receipts
Gas Processing	Deep-cut extraction plants - Flaring	10^6 m^3 gas receipts
Gas Transmission	Venting	km of transmission pipeline
Oil Production	Conventional Oil - Venting	10^3 m^3 of conventional oil produced
Oil Production	Conventional Oil - Flaring	10^3 m^3 of conventional oil produced
Oil Production	Heavy Oil - Venting	10^3 m^3 of heavy oil produced
Oil Production	Heavy Oil - Flaring	10^3 m^3 of heavy oil produced
Oil Production	Crude Bitumen - Venting	10^3 m^3 of crude bitumen produced
Oil Production	Crude Bitumen - Flaring	10^3 m^3 of crude bitumen produced
Transport	Tanker trucks and Rail Cars	10^3 m^3 oil transported by Tanker Truck or Rail Cars
Transport	Loading of Off-shore production Tanker ships	10^3 m^3 oil transported by Tanker Ships

- (a) If using default emission factors these categories will include emissions from production oth
- (b) If using default emission factors, emissions from venting and flaring from all oil and production should

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this d

AS ACTIVITIES (TIER 1)		
B	C	D
Emission Factor	CH ₄ Emissions (Kg CH ₄)	Emissions CH ₄ (Gg CH ₄)
	C = (A x B)	D = (C / 1 000 000)
<i>Kg CH₄ / well drilled</i>	0.00	0.00
<i>Kg CH₄ / well drilled</i>	0.00	0.00
<i>Kg CH₄ / producing and capable well</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / PJ refined</i>	0.00	0.00
<i>Kg CH₄ / PJ refined</i>	0.00	0.00
TOTAL CH₄ FROM OIL		0.00
<i>Kg CH₄ / 10⁶ m³ gas production</i>	0.00	0.00
<i>Kg CH₄ / 10⁶ m³ gas receipts</i>	0.00	0.00
<i>Kg CH₄ / 10⁶ m³ gas receipts</i>	0.00	0.00

<i>Kg CH₄ / 10⁶ m³ gas receipts</i>	0.00	0.00
<i>Kg CH₄ / km of transmission pipeline</i>	0.00	0.00
<i>Kg CH₄ / 10⁶ m³ gas withdrawals</i>	0.00	0.00
<i>Kg CH₄ / km distribution mains</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
TOTAL CH₄ FROM GAS		0.00
<i>Kg CH₄ / 10⁶ m³ gas production</i>	0.00	0.00
<i>Kg CH₄ / 10⁶ m³ gas receipts</i>	0.00	0.00
<i>Kg CH₄ / 10⁶ m³ gas receipts</i>	0.00	0.00
<i>Kg CH₄ / 10⁶ m³ gas receipts</i>	0.00	0.00
<i>Kg CH₄ / 10⁶ m³ gas receipts</i>	0.00	0.00
<i>Kg CH₄ / km of transmission pipeline</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
<i>Kg CH₄ / 10³ m³</i>	0.00	0.00
TOTAL CH₄ FROM VENTING AND FLARING		0.00
TOTAL CH₄ FROM OIL AND GAS		0.00

er than venting and flaring.

be accounted for here.

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This spreadsheet contains sheet 1 of Worksheet 1-8, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

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	0			
YEAR	0			
A	B	C	D	E
Crude Oil Throughput (kt)	Pollutant	Emission factor ^(a) (kg/t)	Emissions (t)	Emissions (Gg)
			D=(AxC)	E=D/1000
	CO	0.09	0.00	0.00
	NO _x	0.06	0.00	0.00
	NM VOC	0.62	0.00	0.00
	SO ₂	0.93	0.00	0.00

(a) Default values. Use local values where possible, particularly for NMVOCs for which emission factors vary widely. The default values shown above have been derived from the values given in the IPCC Reference Manual using an average crude oil density of 860 kg/cubic meter (33 degrees API).

Documentation box: Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.

This spreadsheet contains sheet 2 of Worksheet 1-8, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE	ENERGY			
SUBMODULE	OZONE PRECURSORS AND SO ₂ FROM OIL REFINING			
WORKSHEET	1-8 OZONE PRECURSORS AND SO ₂ FROM CATALYTIC CRACKING			
SHEETS	2 OF 4			
COUNTRY	0			
YEAR	0			
A Catalytic Cracker Throughput (kt)	B Pollutant	C Emission factor ^(a) (kg/t)	D Emissions (t)	E Emissions (Gg)
			D=(AxC)	E=D/1000
	CO	42.6	0.00	0.00
	NOx	0.2	0.00	0.00
	NMVOC	0.6	0.00	0.00
	SO ₂	1.5	0.00	0.00

(a) Default values. Use local values where possible.

The default values shown above have been derived from the values given in the IPCC Reference Manual using an average oil density of 920 kg/cubic meter (22 degrees API).

Documentation box: Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.

This spreadsheet contains sheet 3 of Worksheet 1-8, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY	
SUBMODULE		OZONE PRECURSORS AND SO ₂ FROM OIL REFINING	
WORKSHEET		1-8 SO ₂ FROM SULPHUR RECOVERY PLANTS	
SHEETS		3 OF 4	
COUNTRY		0	
YEAR		0	
A Quantity of Sulphur Recovered (t)	B Emission Factor (kg/t)	C Emissions (kg)	D Emissions (Gg)
		C=AxB	D=(C/1 000 000)
	139	0.00	0.00

Documentation box:

Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box

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This spreadsheet contains sheet 4 of Worksheet 1-8, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

MODULE		ENERGY		
SUBMODULE		OZONE PRECURSORS AND SO ₂ FROM OIL REFINING		
WORKSHEET		1-8 NMVOC EMISSIONS FROM STORAGE AND HANDLING		
SHEETS		4 OF 4		
COUNTRY		0		
YEAR		0		
A	B	C	D	E
Crude Oil Throughput (kt)	Storage Type	Emission factor (kg/t)	Emissions (t)	Emissions (Gg)
			D=(AxC)	E=D/1000
	Secondary Seals	0.2	0.00	0.00
	Primary Seals	0.7	0.00	0.00
	Fixed Roof	4.9	0.00	0.00

Documentation box: Parties are encouraged to provide relevant information used in the calculation and on data sources in this documentation box.