



LITHUANIA'S NATIONAL INVENTORY REPORT 2016

GREENHOUSE GAS EMISSIONS 1990-2014

ANNEXES

VILNIUS, 2016

ANNEX I. Approach 1 and Approach 2 key categories analysis

Approach 1 Level Assessment for 1990

<i>IPCC Category</i>	Greenhouse gas	<i>GHG emissions, kt CO₂ eqv.</i>	Level assessment	Cumulative total
4.A.1 Forest land remaining forest land - carbon stock change in biomass	CO ₂	-6,680.01	0.10	10.4%
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	6,021.25	0.09	19.8%
1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	5,806.05	0.09	28.8%
1.A.3.b Road transportation	CO ₂	5,247.15	0.08	37.0%
4.B.2 Land converted to cropland - net carbon stock change in mineral soils	CO ₂	4,615.45	0.07	44.1%
3.A.1 Enteric Fermentation - Cattle	CH ₄	4,101.48	0.06	50.5%
1.A.2 Manufacturing industries and construction-Liquid fuels	CO ₂	3,500.92	0.05	56.0%
1.A.4 Other sectors-Solid fuels	CO ₂	2,760.55	0.04	60.3%
4.C.2 Land converted to grassland - net carbon stock change in mineral soils	CO ₂	-2,082.10	0.03	63.5%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CO ₂	2,048.76	0.03	66.7%
1.A.3.e Other transportation	CO ₂	1,764.11	0.03	69.4%
2.A.1 Cement Production	CO ₂	1,668.07	0.03	72.0%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,503.71	0.02	74.4%
1.A.4 Other sectors-Liquid fuels	CO ₂	1,429.58	0.02	76.6%
1.A.4 Other sectors-Gaseous fuels	CO ₂	1,381.52	0.02	78.7%
2.B.1 Ammonia Production	CO ₂	1,255.82	0.02	80.7%
5.A Solid Waste Disposal	CH ₄	1,028.83	0.02	82.3%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	992.77	0.02	83.8%
2.B.2 Nitric Acid Production	N ₂ O	893.01	0.01	85.2%
4.A.2 Land converted to forest land - carbon stock change in biomass	CO ₂	-585.97	0.01	86.1%
5.D Wastewater Treatment and Discharge	CH ₄	541.86	0.01	87.0%
4.D.1 Wetland remaining wetlands -net carbon stock change in organic soils	CO ₂	517.33	0.01	87.8%
4.A.1 Forest land remaining forest land - net carbon stock change in dead wood	CO ₂	-474.03	0.01	88.5%
4.A.2 Land converted to forest land - net carbon stock change in litter	CO ₂	-448.14	0.01	89.2%
4.B Cropland	N ₂ O	420.20	0.01	89.9%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	414.53	0.01	90.5%
4.A Forest land-4(II) organic soils	CO ₂	406.04	0.01	91.2%
3.D.2.2 Indirect N ₂ O Emissions From Managed	N ₂ O	375.24	0.01	91.7%

<i>IPCC Category</i>	Greenhouse gas	GHG emissions, kt CO₂ eqv.	Level assessment	Cumulative total
Soils - Nitrogen leaching and run-off				
1.A.3.c Railways	CO ₂	349.97	0.01	92.3%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	317.91	0.00	92.8%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	260.55	0.00	93.2%
3.B.1.1 Manure Management - Cattle	CH ₄	247.40	0.00	93.6%
2.A.4 Other process use of carbonates	CO ₂	239.52	0.00	93.9%
3.B.1.3 Manure Management - Swine	CH ₄	236.72	0.00	94.3%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	227.47	0.00	94.7%
2.A.2 Lime Production	CO ₂	222.68	0.00	95.0%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	206.45	0.00	95.3%
3.B.2 Manure Management - Cattle	N ₂ O	201.63	0.00	95.7%
4.B.1 Cropland remaining cropland - net carbon stock change in mineral soils	CO ₂	195.63	0.00	96.0%
1.A.3.e Other transportation	N ₂ O	186.55	0.00	96.2%
4.B.1 Cropland remaining cropland - net carbon stock change in organic soils	CO ₂	178.17	0.00	96.5%
1.A.1. Energy industries-Solid fuels	CO ₂	174.05	0.00	96.8%
1.A.2 Manufacturing industries and construction-Solid fuels	CO ₂	171.63	0.00	97.1%
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	139.12	0.00	97.3%
4.B.2 Land converted to cropland- net carbon stock change in organic soils	CO ₂	133.17	0.00	97.5%
1.A.4 Other sectors-Solid fuels	CH ₄	128.56	0.00	97.7%
3.A. Enteric Fermentation - Others	CH ₄	118.06	0.00	97.9%
3.B.1 Manure Management - Other	N ₂ O	109.48	0.00	98.0%
4.B.2 Land converted to cropland- carbon stock change in biomass	CO ₂	98.41	0.00	98.2%
2.G Other product manufacture and use	N ₂ O	96.05	0.00	98.3%
4.G Harvested wood products	CO ₂	-95.65	0.00	98.5%
4.C.1 Grassland remaining grassland	CO ₂	80.81	0.00	98.6%
4.B.1 Cropland remaining cropland - carbon stock change in biomass	CO ₂	77.39	0.00	98.7%
3.B.1 Manure Management - Other	CH ₄	75.24	0.00	98.9%
1.A.4 Other sectors-Biomass	CH ₄	70.28	0.00	99.0%
5.D Wastewater Treatment and Discharge	N ₂ O	67.21	0.00	99.1%
2. D Non-energy products from fuels and solvent use	CO ₂	65.87	0.00	99.2%
1.A.3.b Road transportation	CH ₄	48.11	0.00	99.2%
4.C.2 Land converted to grassland- net carbon	CO ₂	45.06	0.00	99.3%

<i>IPCC Category</i>	Greenhouse gas	<i>GHG emissions, kt CO₂ eqv.</i>	Level assessment	Cumulative total
stock change in organic soils				
1.A.3.c Railways	N ₂ O	40.92	0.00	99.4%
1.A.3.b Road transportation	N ₂ O	39.09	0.00	99.4%
3.H Urea Application	CO ₂	35.68	0.00	99.5%
4.A Forest land	N ₂ O	33.55	0.00	99.5%
1.A.4 Other sectors-Peat	CO ₂	27.13	0.00	99.6%
2.B.8.a Methanol	CO ₂	24.35	0.00	99.6%
3.G Liming	CO ₂	20.59	0.00	99.7%
1.A.2 Manufacturing industries and construction-Peat	CO ₂	17.53	0.00	99.7%
2.C.1 Iron and Steel Production	CO ₂	16.98	0.00	99.7%
1.A.1. Energy industries-Liquid fuels	N ₂ O	16.11	0.00	99.7%
1.A.3.d Domestic Navigation	CO ₂	15.49	0.00	99.8%
1.A.4 Other sectors-Solid fuels	N ₂ O	13.00	0.00	99.8%
1.A.4 Other sectors-Biomass	N ₂ O	12.97	0.00	99.8%
4.D Wetlands	N ₂ O	11.92	0.00	99.8%
2.A.3 Glass Production	CO ₂	11.70	0.00	99.8%
1.A.1. Energy industries-Peat	CO ₂	11.06	0.00	99.9%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	10.94	0.00	99.9%
1.A.3.a Domestic aviation	CO ₂	8.16	0.00	99.9%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	8.06	0.00	99.9%
1.A.1. Energy industries-Liquid fuels	CH ₄	6.90	0.00	99.9%
2.B.8.a Methanol	CH ₄	5.24	0.00	99.9%
1.A.3.e Other transportation	CH ₄	4.30	0.00	99.9%
4.A.1 Forest land remaining forest land	CO ₂	4.28	0.00	99.9%
1.A.4 Other sectors-Liquid fuels	CH ₄	4.17	0.00	99.9%
5.B Biological Treatment of Solid Waste	CH ₄	4.04	0.00	99.9%
1.A.2 Manufacturing industries and construction-Liquid fuels	CH ₄	3.38	0.00	99.9%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	3.13	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	CH ₄	3.13	0.00	100.0%
5.B Biological Treatment of Solid Waste	N ₂ O	2.89	0.00	100.0%
1.A.4 Other sectors-Liquid fuels	N ₂ O	2.67	0.00	100.0%
5.C Incineration and Open Burning of Waste	CO ₂	2.66	0.00	100.0%
1.A.1. Energy industries-Gaseous fuels	CH ₄	2.63	0.00	100.0%
4.C Grassland	N ₂ O	2.49	0.00	100.0%
4.C Grassland	CH ₄	2.12	0.00	100.0%

<i>IPCC Category</i>	Greenhouse gas	<i>GHG emissions, kt CO₂ eqv.</i>	Level assessment	Cumulative total
1.A.4 Other sectors-Peat	CH ₄	1.12	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	1.11	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.93	0.00	100.0%
1.A.1. Energy industries-Solid fuels	N ₂ O	0.82	0.00	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	0.81	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.75	0.00	100.0%
4.A Forest land	CH ₄	0.71	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	CO ₂	0.63	0.00	100.0%
1.A.1. Energy industries-Biomass	N ₂ O	0.63	0.00	100.0%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	0.60	0.00	100.0%
1.A.3.c Railways	CH ₄	0.50	0.00	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	0.45	0.00	100.0%
1.A.1. Energy industries-Biomass	CH ₄	0.40	0.00	100.0%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	0.38	0.00	100.0%
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.00	100.0%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	0.26	0.00	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.13	0.00	100.0%
1.A.4 Other sectors-Peat	N ₂ O	0.11	0.00	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.08	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.08	0.00	100.0%
1.A.3.a Domestic aviation	N ₂ O	0.07	0.00	100.0%
4.B Cropland	CH ₄	0.05	0.00	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.05	0.00	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.05	0.00	100.0%
1.A.3.d Domestic Navigation	CH ₄	0.04	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.01	0.00	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.00	0.00	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	100.0%

<i>IPCC Category</i>	Greenhouse gas	<i>GHG emissions, kt CO₂ eqv.</i>	Level assessment	Cumulative total
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
2. E Electronic Industry	SF ₆ , NF ₃	0.00	0.00	100.0%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	0.00	0.00	100.0%
2.F.2 Foam Blowing Agents	HFCs	0.00	0.00	100.0%
2.F.3 Fire Protection	HFCs	0.00	0.00	100.0%
2.F.4 Aerosols/metered dose inhalers	HFCs	0.00	0.00	100.0%
2.G Other product manufacture and use	SF ₆	0.00	0.00	100.0%
4.D.2 Land converted to wetlands	CO ₂	0.00	0.00	100.0%
4.E.1 Settlements remaining settlements	CO ₂	0.00	0.00	100.0%
4.E.2 Land converted to settlements	CO ₂	0.00	0.00	100.0%
4.F Other land	CO ₂	0.00	0.00	100.0%
Total		43,537.84		

Approach 1 Level Assessment for 1990 using a subset (LULUCF was excluded from analysis)

<i>IPCC Category</i>	Greenhouse gas	<i>GHG emissions, kt CO₂ eqv.</i>	Level assessment	Cumulative total
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	6,021.25	0.13	12.8%
1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	5,806.05	0.12	25.1%
1.A.3.b Road transportation	CO ₂	5,247.15	0.11	36.3%
3.A.1 Enteric Fermentation - Cattle	CH ₄	4,101.48	0.09	45.0%
1.A.2 Manufacturing industries and construction- Liquid fuels	CO ₂	3,500.92	0.07	52.4%
1.A.4 Other sectors-Solid fuels	CO ₂	2,760.55	0.06	58.3%
1.A.2 Manufacturing industries and construction- Gaseous fuels	CO ₂	2,048.76	0.04	62.6%
1.A.3.e Other transportation	CO ₂	1,764.11	0.04	66.4%
2.A.1 Cement Production	CO ₂	1,668.07	0.04	69.9%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,503.71	0.03	73.1%
1.A.4 Other sectors-Liquid fuels	CO ₂	1,429.58	0.03	76.1%
1.A.4 Other sectors-Gaseous fuels	CO ₂	1,381.52	0.03	79.1%
2.B.1 Ammonia Production	CO ₂	1,255.82	0.03	81.8%
5.A Solid Waste Disposal	CH ₄	1,028.83	0.02	83.9%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	992.77	0.02	86.0%
2.B.2 Nitric Acid Production	N ₂ O	893.01	0.02	87.9%
5.D Wastewater Treatment and Discharge	CH ₄	541.86	0.01	89.1%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	414.53	0.01	90.0%
3.D.2.2 Indirect N ₂ O Emissions From Managed Soils - Nitrogen leaching and run-off	N ₂ O	375.24	0.01	90.8%
1.A.3.c Railways	CO ₂	349.97	0.01	91.5%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	317.91	0.01	92.2%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	260.55	0.01	92.7%
3.B.1.1 Manure Management - Cattle	CH ₄	247.40	0.01	93.3%
2.A.4 Other process use of carbonates	CO ₂	239.52	0.01	93.8%
3.B.1.3 Manure Management - Swine	CH ₄	236.72	0.01	94.3%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	227.47	0.00	94.8%
2.A.2 Lime Production	CO ₂	222.68	0.00	95.2%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	206.45	0.00	95.7%
3.B.2 Manure Management - Cattle	N ₂ O	201.63	0.00	96.1%
1.A.3.e Other transportation	N ₂ O	186.55	0.00	96.5%
1.A.1. Energy industries-Solid fuels	CO ₂	174.05	0.00	96.9%
1.A.2 Manufacturing industries and construction- Solid fuels	CO ₂	171.63	0.00	97.2%

<i>IPCC Category</i>	Greenhouse gas	<i>GHG emissions, kt CO₂ eqv.</i>	Level assessment	Cumulative total
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	139.12	0.00	97.5%
1.A.4 Other sectors-Solid fuels	CH ₄	128.56	0.00	97.8%
3.A. Enteric Fermentation - Others	CH ₄	118.06	0.00	98.1%
3.B.1 Manure Management - Other	N ₂ O	109.48	0.00	98.3%
2.G Other product manufacture and use	N ₂ O	96.05	0.00	98.5%
3.B.1 Manure Management - Other	CH ₄	75.24	0.00	98.6%
1.A.4 Other sectors-Biomass	CH ₄	70.28	0.00	98.8%
5.D Wastewater Treatment and Discharge	N ₂ O	67.21	0.00	98.9%
2. D Non-energy products from fuels and solvent use	CO ₂	65.87	0.00	99.1%
1.A.3.b Road transportation	CH ₄	48.11	0.00	99.2%
1.A.3.c Railways	N ₂ O	40.92	0.00	99.3%
1.A.3.b Road transportation	N ₂ O	39.09	0.00	99.4%
3.H Urea Application	CO ₂	35.68	0.00	99.4%
1.A.4 Other sectors-Peat	CO ₂	27.13	0.00	99.5%
2.B.8.a Methanol	CO ₂	24.35	0.00	99.5%
3.G Liming	CO ₂	20.59	0.00	99.6%
1.A.2 Manufacturing industries and construction-Peat	CO ₂	17.53	0.00	99.6%
2.C.1 Iron and Steel Production	CO ₂	16.98	0.00	99.7%
1.A.1. Energy industries-Liquid fuels	N ₂ O	16.11	0.00	99.7%
1.A.3.d Domestic Navigation	CO ₂	15.49	0.00	99.7%
1.A.4 Other sectors-Solid fuels	N ₂ O	13.00	0.00	99.7%
1.A.4 Other sectors-Biomass	N ₂ O	12.97	0.00	99.8%
2.A.3 Glass Production	CO ₂	11.70	0.00	99.8%
1.A.1. Energy industries-Peat	CO ₂	11.06	0.00	99.8%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	10.94	0.00	99.8%
1.A.3.a Domestic aviation	CO ₂	8.16	0.00	99.9%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	8.06	0.00	99.9%
1.A.1. Energy industries-Liquid fuels	CH ₄	6.90	0.00	99.9%
2.B.8.a Methanol	CH ₄	5.24	0.00	99.9%
1.A.3.e Other transportation	CH ₄	4.30	0.00	99.9%
1.A.4 Other sectors-Liquid fuels	CH ₄	4.17	0.00	99.9%
5.B Biological Treatment of Solid Waste	CH ₄	4.04	0.00	99.9%
1.A.2 Manufacturing industries and construction-Liquid fuels	CH ₄	3.38	0.00	99.9%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	3.13	0.00	99.9%
1.A.4 Other sectors-Gaseous fuels	CH ₄	3.13	0.00	100.0%
5.B Biological Treatment of Solid Waste	N ₂ O	2.89	0.00	100.0%
1.A.4 Other sectors-Liquid fuels	N ₂ O	2.67	0.00	100.0%
5.C Incineration and Open Burning of Waste	CO ₂	2.66	0.00	100.0%

<i>IPCC Category</i>	Greenhouse gas	<i>GHG emissions, kt CO₂ eqv.</i>	Level assessment	Cumulative total
1.A.1. Energy industries-Gaseous fuels	CH ₄	2.63	0.00	100.0%
1.A.4 Other sectors-Peat	CH ₄	1.12	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	1.11	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.93	0.00	100.0%
1.A.1. Energy industries-Solid fuels	N ₂ O	0.82	0.00	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	0.81	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.75	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	CO ₂	0.63	0.00	100.0%
1.A.1. Energy industries-Biomass	N ₂ O	0.63	0.00	100.0%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	0.60	0.00	100.0%
1.A.3.c Railways	CH ₄	0.50	0.00	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	0.45	0.00	100.0%
1.A.1. Energy industries-Biomass	CH ₄	0.40	0.00	100.0%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	0.38	0.00	100.0%
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.00	100.0%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	0.26	0.00	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.13	0.00	100.0%
1.A.4 Other sectors-Peat	N ₂ O	0.11	0.00	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.08	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.08	0.00	100.0%
1.A.3.a Domestic aviation	N ₂ O	0.07	0.00	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.05	0.00	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.05	0.00	100.0%
1.A.3.d Domestic Navigation	CH ₄	0.04	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.01	0.00	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.00	0.00	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-	CH ₄	0.00	0.00	100.0%

<i>IPCC Category</i>	Greenhouse gas	<i>GHG emissions, kt CO₂ eqv.</i>	Level assessment	Cumulative total
Other fossil fuels				
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
2. E Electronic Industry	SF ₆ , NF ₃	0.00	0.00	100.0%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	0.00	0.00	100.0%
2.F.2 Foam Blowing Agents	HFCs	0.00	0.00	100.0%
2.F.3 Fire Protection	HFCs	0.00	0.00	100.0%
2.F.4 Aerosols/metered dose inhalers	HFCs	0.00	0.00	100.0%
2.G Other product manufacture and use	SF ₆	0.00	0.00	100.0%
Total		47,080.98		

Approach 1 Level Assessment for 2014

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment</i>	<i>Cumulative total</i>
4.A.1 Forest land remaining forest land - carbon stock change in biomass	CO ₂	-8,447.64	0.21	21.2%
1.A.3.b Road transportation	CO ₂	4,547.12	0.11	32.5%
4.B.2 Land converted to cropland - net carbon stock change in mineral soils	CO ₂	3,525.13	0.09	41.4%
4.C.2 Land converted to grassland - net carbon stock change in mineral soils	CO ₂	-2,830.85	0.07	48.5%
2.B.1 Ammonia Production	CO ₂	1,875.12	0.05	53.2%
3.A.1 Enteric Fermentation - Cattle	CH ₄	1,570.66	0.04	57.1%
1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	1,532.96	0.04	60.9%
4.G Harvested wood products	CO ₂	-1,399.35	0.04	64.4%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,305.06	0.03	67.7%
4.D.1 Wetlands remaining wetlands -net carbon stock change in organic soils	CO ₂	875.20	0.02	69.9%
5.A Solid Waste Disposal	CH ₄	834.33	0.02	72.0%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	721.16	0.02	73.8%
4.A.2 Land converted to forest land - carbon stock change in biomass	CO ₂	-678.70	0.02	75.5%
4.A.1 Forest land remaining forest land - net carbon stock change in dead wood	CO ₂	-600.29	0.02	77.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CO ₂	543.13	0.01	78.4%
4.A.2 Land converted to forest land - net carbon stock change in litter	CO ₂	-516.68	0.01	79.6%
1.A.2 Manufacturing industries and construction-Solid fuels	CO ₂	473.11	0.01	80.8%
1.A.4 Other sectors-Gaseous fuels	CO ₂	461.17	0.01	82.0%
4.A Forest land-4(II) organic soils	CO ₂	432.78	0.01	83.1%
2.A.1 Cement Production	CO ₂	400.83	0.01	84.1%
4.E.2 Land converted to settlements	CO ₂	372.65	0.01	85.0%
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	353.56	0.01	85.9%
4.B.2 Land converted to cropland- carbon stock change in biomass	CO ₂	349.73	0.01	86.8%
2.B.2 Nitric Acid Production	N ₂ O	331.76	0.01	87.6%
4.B Cropland	N ₂ O	322.03	0.01	88.4%
1.A.4 Other sectors-Solid fuels	CO ₂	305.30	0.01	89.2%
3.D.2.2 Indirect N ₂ O Emissions From Managed Soils - Nitrogen leaching and run-off	N ₂ O	293.99	0.01	89.9%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	289.94	0.01	90.6%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	276.55	0.01	91.3%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment</i>	<i>Cumulative total</i>
1.A.3.e Other transportation	CO ₂	236.35	0.01	91.9%
5.D Wastewater Treatment and Discharge	CH ₄	219.90	0.01	92.5%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	190.08	0.00	92.9%
1.A.4 Other sectors-Liquid fuels	CO ₂	182.35	0.00	93.4%
4.B.1 Cropland remaining cropland - net carbon stock change in organic soils	CO ₂	174.33	0.00	93.8%
1.A.3.c Railways	CO ₂	174.13	0.00	94.3%
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	151.42	0.00	94.7%
1.A.4 Other sectors-Biomass	CH ₄	150.36	0.00	95.0%
3.B.1.1 Manure Management - Cattle	CH ₄	137.58	0.00	95.4%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	127.96	0.00	95.7%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	118.49	0.00	96.0%
1.A.4 Other sectors-Peat	CO ₂	109.04	0.00	96.3%
4.B.2 Land converted to cropland- net carbon stock change in organic soils	CO ₂	102.05	0.00	96.5%
1.A.1. Energy industries-Other fossil fuels	CO ₂	82.56	0.00	96.7%
4.C.1 Grassland remaining grassland	CO ₂	81.96	0.00	96.9%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	80.96	0.00	97.1%
3.B.2 Manure Management - Cattle	N ₂ O	75.65	0.00	97.3%
1.A.2 Manufacturing industries and construction-Liquid fuels	CO ₂	75.49	0.00	97.5%
3.B.1.3 Manure Management - Swine	CH ₄	71.18	0.00	97.7%
3.A. Enteric Fermentation - Others	CH ₄	66.74	0.00	97.9%
4.C.2 Land converted to grassland- net carbon stock change in organic soils	CO ₂	63.87	0.00	98.0%
2. D Non-energy products from fuels and solvent use	CO ₂	62.62	0.00	98.2%
4.B.1 Cropland remaining cropland - net carbon stock change in mineral soils	CO ₂	-53.90	0.00	98.3%
4.F Other land	CO ₂	50.11	0.00	98.4%
5.D Wastewater Treatment and Discharge	N ₂ O	45.27	0.00	98.6%
2.A.2 Lime Production	CO ₂	41.22	0.00	98.7%
4.A Forest land	N ₂ O	36.09	0.00	98.7%
1.A.3.b Road transportation	N ₂ O	35.36	0.00	98.8%
1.A.4 Other sectors-Biomass	N ₂ O	27.63	0.00	98.9%
3.B.1 Manure Management - Other	CH ₄	27.10	0.00	99.0%
4.C Grassland	N ₂ O	26.30	0.00	99.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment</i>	<i>Cumulative total</i>
3.G Liming	CO ₂	24.71	0.00	99.1%
1.A.1. Energy industries-Biomass	N ₂ O	22.95	0.00	99.2%
5.B Biological Treatment of Solid Waste	CH ₄	20.44	0.00	99.2%
1.A.3.c Railways	N ₂ O	20.36	0.00	99.3%
1.A.3.e Other transportation	N ₂ O	19.15	0.00	99.3%
1.A.1. Energy industries-Peat	CO ₂	17.63	0.00	99.4%
2.A.4 Other process use of carbonates	CO ₂	17.46	0.00	99.4%
3.H Urea Application	CO ₂	15.72	0.00	99.4%
1.A.3.b Road transportation	CH ₄	14.81	0.00	99.5%
5.B Biological Treatment of Solid Waste	N ₂ O	14.62	0.00	99.5%
1.A.3.d Domestic Navigation	CO ₂	14.51	0.00	99.5%
1.A.1. Energy industries-Biomass	CH ₄	14.44	0.00	99.6%
1.A.4 Other sectors-Solid fuels	CH ₄	14.27	0.00	99.6%
2.F.2 Foam Blowing Agents	HFCs	14.14	0.00	99.7%
4.B.1 Cropland remaining cropland - carbon stock change in biomass	CO ₂	-13.37	0.00	99.7%
3.B.1 Manure Management - Other	N ₂ O	12.34	0.00	99.7%
4.D.2 Land converted to wetlands	CO ₂	12.30	0.00	99.7%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	8.19	0.00	99.8%
2.A.3 Glass Production	CO ₂	7.41	0.00	99.8%
1.A.2 Manufacturing industries and construction-Peat	CO ₂	6.78	0.00	99.8%
1.A.1. Energy industries-Solid fuels	CO ₂	6.74	0.00	99.8%
2.F.4 Aerosols/metered dose inhalers	HFCs	6.20	0.00	99.8%
4.A.1 Forest land remaining forest land	CO ₂	5.37	0.00	99.8%
2.G Other product manufacture and use	N ₂ O	5.19	0.00	99.9%
2. E Electronic Industry	SF ₆ , NF ₃	5.05	0.00	99.9%
1.A.4 Other sectors-Peat	CH ₄	4.91	0.00	99.9%
4.D Wetlands	N ₂ O	4.77	0.00	99.9%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	4.08	0.00	99.9%
1.B.2 Oil, natural gas and other emissions from energy production	CO ₂	4.01	0.00	99.9%
2.C.1 Iron and Steel Production	CO ₂	2.60	0.00	99.9%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	2.56	0.00	99.9%
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	2.20	0.00	99.9%
2.F.3 Fire Protection	HFCs	2.15	0.00	99.9%
5.C Incineration and Open Burning of Waste	CO ₂	1.96	0.00	99.9%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment</i>	<i>Cumulative total</i>
4.C Grassland	CH ₄	1.95	0.00	100.0%
1.A.3.a Domestic aviation	CO ₂	1.94	0.00	100.0%
1.A.1. Energy industries-Liquid fuels	N ₂ O	1.83	0.00	100.0%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	1.79	0.00	100.0%
1.A.4 Other sectors-Solid fuels	N ₂ O	1.44	0.00	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	1.23	0.00	100.0%
2.G Other product manufacture and use	SF ₆	1.22	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	CH ₄	1.04	0.00	100.0%
4.A Forest land	CH ₄	0.95	0.00	100.0%
1.A.1. Energy industries-Liquid fuels	CH ₄	0.93	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.90	0.00	100.0%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	0.83	0.00	100.0%
1.A.1. Energy industries-Gaseous fuels	CH ₄	0.70	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.57	0.00	100.0%
1.A.4 Other sectors-Liquid fuels	CH ₄	0.46	0.00	100.0%
1.A.4 Other sectors-Peat	N ₂ O	0.44	0.00	100.0%
1.A.3.e Other transportation	CH ₄	0.38	0.00	100.0%
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	0.29	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.25	0.00	100.0%
1.A.3.c Railways	CH ₄	0.25	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.25	0.00	100.0%
1.A.4 Other sectors-Liquid fuels	N ₂ O	0.23	0.00	100.0%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	0.14	0.00	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.12	0.00	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.08	0.00	100.0%
1.A.2 Manufacturing industries and construction-Liquid fuels	CH ₄	0.06	0.00	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.06	0.00	100.0%
4.B Cropland	CH ₄	0.05	0.00	100.0%
1.A.3.d Domestic Navigation	CH ₄	0.03	0.00	100.0%
1.A.1. Energy industries-Solid fuels	N ₂ O	0.03	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.03	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.02	0.00	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment</i>	<i>Cumulative total</i>
1.A.3.a Domestic aviation	N ₂ O	0.02	0.00	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.00	0.00	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.00	0.00	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
2.B.8.a Methanol	CO ₂	0.00	0.00	100.0%
2.B.8.a Methanol	CH ₄	0.00	0.00	100.0%
4.E.1 Settlements remaining settlements	CO ₂	0.00	0.00	100.0%
Total		10,847.53		

Approach 1 Level Assessment for 2014 using a subset (LULUCF was excluded from analysis)

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment</i>	<i>Cumulative total</i>
1.A.3.b Road transportation	CO ₂	4,547.12	0.24	24.0%
2.B.1 Ammonia Production	CO ₂	1,875.12	0.10	33.9%
3.A.1 Enteric Fermentation - Cattle	CH ₄	1,570.66	0.08	42.2%
1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	1,532.96	0.08	50.3%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,305.06	0.07	57.2%
5.A Solid Waste Disposal	CH ₄	834.33	0.04	61.6%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	721.16	0.04	65.4%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CO ₂	543.13	0.03	68.2%
1.A.2 Manufacturing industries and construction-Solid fuels	CO ₂	473.11	0.02	70.7%
1.A.4 Other sectors-Gaseous fuels	CO ₂	461.17	0.02	73.2%
2.A.1 Cement Production	CO ₂	400.83	0.02	75.3%
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	353.56	0.02	77.1%
2.B.2 Nitric Acid Production	N ₂ O	331.76	0.02	78.9%
1.A.4 Other sectors-Solid fuels	CO ₂	305.30	0.02	80.5%
3.D.2.2 Indirect N ₂ O Emissions From Managed Soils - Nitrogen leaching and run-off	N ₂ O	293.99	0.02	82.1%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	289.94	0.02	83.6%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	276.55	0.01	85.0%
1.A.3.e Other transportation	CO ₂	236.35	0.01	86.3%
5.D Wastewater Treatment and Discharge	CH ₄	219.90	0.01	87.4%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	190.08	0.01	88.5%
1.A.4 Other sectors-Liquid fuels	CO ₂	182.35	0.01	89.4%
1.A.3.c Railways	CO ₂	174.13	0.01	90.3%
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	151.42	0.01	91.1%
1.A.4 Other sectors-Biomass	CH ₄	150.36	0.01	91.9%
3.B.1.1 Manure Management - Cattle	CH ₄	137.58	0.01	92.7%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	127.96	0.01	93.3%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	118.49	0.01	94.0%
1.A.4 Other sectors-Peat	CO ₂	109.04	0.01	94.5%
1.A.1. Energy industries-Other fossil fuels	CO ₂	82.56	0.00	95.0%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	80.96	0.00	95.4%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment</i>	<i>Cumulative total</i>
3.B.2 Manure Management - Cattle	N ₂ O	75.65	0.00	95.8%
1.A.2 Manufacturing industries and construction-Liquid fuels	CO ₂	75.49	0.00	96.2%
3.B.1.3 Manure Management - Swine	CH ₄	71.18	0.00	96.6%
3.A. Enteric Fermentation - Others	CH ₄	66.74	0.00	96.9%
2. D Non-energy products from fuels and solvent use	CO ₂	62.62	0.00	97.2%
5.D Wastewater Treatment and Discharge	N ₂ O	45.27	0.00	97.5%
2.A.2 Lime Production	CO ₂	41.22	0.00	97.7%
1.A.3.b Road transportation	N ₂ O	35.36	0.00	97.9%
1.A.4 Other sectors-Biomass	N ₂ O	27.63	0.00	98.0%
3.B.1 Manure Management - Other	CH ₄	27.10	0.00	98.2%
3.G Liming	CO ₂	24.71	0.00	98.3%
1.A.1. Energy industries-Biomass	N ₂ O	22.95	0.00	98.4%
5.B Biological Treatment of Solid Waste	CH ₄	20.44	0.00	98.5%
1.A.3.c Railways	N ₂ O	20.36	0.00	98.6%
1.A.3.e Other transportation	N ₂ O	19.15	0.00	98.7%
1.A.1. Energy industries-Peat	CO ₂	17.63	0.00	98.8%
2.A.4 Other process use of carbonates	CO ₂	17.46	0.00	98.9%
3.H Urea Application	CO ₂	15.72	0.00	99.0%
1.A.3.b Road transportation	CH ₄	14.81	0.00	99.1%
5.B Biological Treatment of Solid Waste	N ₂ O	14.62	0.00	99.2%
1.A.3.d Domestic Navigation	CO ₂	14.51	0.00	99.2%
1.A.1. Energy industries-Biomass	CH ₄	14.44	0.00	99.3%
1.A.4 Other sectors-Solid fuels	CH ₄	14.27	0.00	99.4%
2.F.2 Foam Blowing Agents	HFCs	14.14	0.00	99.5%
3.B.1 Manure Management - Other	N ₂ O	12.34	0.00	99.5%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	8.19	0.00	99.6%
2.A.3 Glass Production	CO ₂	7.41	0.00	99.6%
1.A.2 Manufacturing industries and construction-Peat	CO ₂	6.78	0.00	99.7%
1.A.1. Energy industries-Solid fuels	CO ₂	6.74	0.00	99.7%
2.F.4 Aerosols/metered dose inhalers	HFCs	6.20	0.00	99.7%
2.G Other product manufacture and use	N ₂ O	5.19	0.00	99.7%
2. E Electronic Industry	SF ₆ , NF ₃	5.05	0.00	99.8%
1.A.4 Other sectors-Peat	CH ₄	4.91	0.00	99.8%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	4.08	0.00	99.8%
1.B.2 Oil, natural gas and other emissions from	CO ₂	4.01	0.00	99.8%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment</i>	<i>Cumulative total</i>
energy production				
2.C.1 Iron and Steel Production	CO ₂	2.60	0.00	99.9%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	2.56	0.00	99.9%
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	2.20	0.00	99.9%
2.F.3 Fire Protection	HFCs	2.15	0.00	99.9%
5.C Incineration and Open Burning of Waste	CO ₂	1.96	0.00	99.9%
1.A.3.a Domestic aviation	CO ₂	1.94	0.00	99.9%
1.A.1. Energy industries-Liquid fuels	N ₂ O	1.83	0.00	99.9%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	1.79	0.00	99.9%
1.A.4 Other sectors-Solid fuels	N ₂ O	1.44	0.00	99.9%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	1.23	0.00	99.9%
2.G Other product manufacture and use	SF ₆	1.22	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	CH ₄	1.04	0.00	100.0%
1.A.1. Energy industries-Liquid fuels	CH ₄	0.93	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.90	0.00	100.0%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	0.83	0.00	100.0%
1.A.1. Energy industries-Gaseous fuels	CH ₄	0.70	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.57	0.00	100.0%
1.A.4 Other sectors-Liquid fuels	CH ₄	0.46	0.00	100.0%
1.A.4 Other sectors-Peat	N ₂ O	0.44	0.00	100.0%
1.A.3.e Other transportation	CH ₄	0.38	0.00	100.0%
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	0.29	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.25	0.00	100.0%
1.A.3.c Railways	CH ₄	0.25	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.25	0.00	100.0%
1.A.4 Other sectors-Liquid fuels	N ₂ O	0.23	0.00	100.0%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	0.14	0.00	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.12	0.00	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.08	0.00	100.0%
1.A.2 Manufacturing industries and construction-Liquid fuels	CH ₄	0.06	0.00	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.06	0.00	100.0%
1.A.3.d Domestic Navigation	CH ₄	0.03	0.00	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment</i>	<i>Cumulative total</i>
1.A.1. Energy industries-Solid fuels	N ₂ O	0.03	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.03	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.02	0.00	100.0%
1.A.3.a Domestic aviation	N ₂ O	0.02	0.00	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.00	0.00	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.00	0.00	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
2.B.8.a Methanol	CO ₂	0.00	0.00	100.0%
2.B.8.a Methanol	CH ₄	0.00	0.00	100.0%
Total		18,950.68		

Approach 1 Trend Assessment for 2014

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	6,021.25	151.42	0.15	13.7%	13.7%
4.A.1 Forest land remaining forest land - carbon stock change in biomass	CO ₂	-6,680.01	-8,447.64	0.12	11.7%	25.3%
1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	5,806.05	1,532.96	0.09	8.7%	34.0%
1.A.2 Manufacturing industries and construction-Liquid fuels	CO ₂	3,500.92	75.49	0.09	8.0%	42.0%
1.A.4 Other sectors-Solid fuels	CO ₂	2,760.55	305.30	0.06	5.5%	47.5%
3.A.1 Enteric Fermentation - Cattle	CH ₄	4,101.48	1,570.66	0.05	4.5%	52.0%
4.G Harvested wood products	CO ₂	-95.65	-1,399.35	0.05	4.3%	56.3%
4.C.2 Land converted to grassland - net carbon stock change in mineral soils	CO ₂	-2,082.10	-2,830.85	0.05	4.3%	60.6%
1.A.3.e Other transportation	CO ₂	1,764.11	236.35	0.04	3.4%	64.0%
2.B.1 Ammonia Production	CO ₂	1,255.82	1,875.12	0.03	3.1%	67.1%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CO ₂	2,048.76	543.13	0.03	3.1%	70.2%
1.A.4 Other sectors-Liquid fuels	CO ₂	1,429.58	182.35	0.03	2.8%	72.9%
2.A.1 Cement Production	CO ₂	1,668.07	400.83	0.03	2.6%	75.6%
1.A.3.b Road transportation	CO ₂	5,247.15	4,547.12	0.03	2.4%	78.0%
1.A.4 Other sectors-Gaseous fuels	CO ₂	1,381.52	461.17	0.02	1.8%	79.7%
4.D.1 Wetland remaining wetlands -net carbon stock change in organic soils	CO ₂	517.33	875.20	0.02	1.6%	81.3%
4.E.2 Land converted to settlements	CO ₂	0.00	372.65	0.01	1.2%	82.5%
1.A.2 Manufacturing industries and construction-Solid fuels	CO ₂	171.63	473.11	0.01	1.1%	83.7%
2.B.2 Nitric Acid Production	N ₂ O	893.01	331.76	0.01	1.0%	84.7%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	2.19	289.94	0.01	0.9%	85.6%
4.B.2 Land converted to cropland- carbon stock change in biomass	CO ₂	98.41	349.73	0.01	0.9%	86.5%
4.A.1 Forest land remaining forest land - net carbon stock change in dead wood	CO ₂	-474.03	-600.29	0.01	0.8%	87.4%
4.A.2 Land converted to forest land - carbon stock change in biomass	CO ₂	-585.97	-678.70	0.01	0.8%	88.2%
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	139.12	353.56	0.01	0.8%	89.0%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,503.71	1,305.06	0.01	0.7%	89.7%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
4.A.2 Land converted to forest land - net carbon stock change in litter	CO ₂	-448.14	-516.68	0.01	0.6%	90.3%
4.B.2 Land converted to cropland - net carbon stock change in mineral soils	CO ₂	4,615.45	3,525.13	0.01	0.6%	90.9%
5.D Wastewater Treatment and Discharge	CH ₄	541.86	219.90	0.01	0.6%	91.4%
2.A.4 Other process use of carbonates	CO ₂	239.52	17.46	0.01	0.5%	92.0%
4.A Forest land-4(II) organic soils	CO ₂	406.04	432.78	0.00	0.4%	92.4%
2.A.2 Lime Production	CO ₂	222.68	41.22	0.00	0.4%	92.8%
1.A.1. Energy industries-Solid fuels	CO ₂	174.05	6.74	0.00	0.4%	93.2%
1.A.3.e Other transportation	N ₂ O	186.55	19.15	0.00	0.4%	93.6%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	414.53	190.08	0.00	0.4%	93.9%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	317.91	127.96	0.00	0.3%	94.2%
3.B.1.3 Manure Management - Swine	CH ₄	236.72	71.18	0.00	0.3%	94.6%
1.A.4 Other sectors-Biomass	CH ₄	70.28	150.36	0.00	0.3%	94.9%
1.A.4 Other sectors-Peat	CO ₂	27.13	109.04	0.00	0.3%	95.2%
5.A Solid Waste Disposal	CH ₄	1,028.83	834.33	0.00	0.3%	95.5%
4.B.1 Cropland remaining cropland - net carbon stock change in mineral soils	CO ₂	195.63	-53.90	0.00	0.3%	95.7%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	260.55	276.55	0.00	0.3%	96.0%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	227.47	80.96	0.00	0.3%	96.3%
1.A.1. Energy industries-Other fossil fuels	CO ₂	0.00	82.56	0.00	0.3%	96.6%
1.A.3.c Railways	CO ₂	349.97	174.13	0.00	0.3%	96.8%
1.A.4 Other sectors-Solid fuels	CH ₄	128.56	14.27	0.00	0.3%	97.1%
3.B.2 Manure Management - Cattle	N ₂ O	201.63	75.65	0.00	0.2%	97.3%
3.B.1 Manure Management - Other	N ₂ O	109.48	12.34	0.00	0.2%	97.5%
2.G Other product manufacture and use	N ₂ O	96.05	5.19	0.00	0.2%	97.7%
4.F Other land	CO ₂	0.00	50.11	0.00	0.2%	97.9%
4.B.1 Cropland remaining cropland - net carbon stock change in organic soils	CO ₂	178.17	174.33	0.00	0.1%	98.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
4.B.1 Cropland remaining cropland - carbon stock change in biomass	CO ₂	77.39	-13.37	0.00	0.1%	98.2%
3.B.1.1 Manure Management - Cattle	CH ₄	247.40	137.58	0.00	0.1%	98.3%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	206.45	118.49	0.00	0.1%	98.4%
4.C.2 Land converted to grassland- net carbon stock change in organic soils	CO ₂	45.06	63.87	0.00	0.1%	98.5%
3.B.1 Manure Management - Other	CH ₄	75.24	27.10	0.00	0.1%	98.6%
4.C Grassland	N ₂ O	2.49	26.30	0.00	0.1%	98.7%
4.C.1 Grassland remaining grassland	CO ₂	80.81	81.96	0.00	0.1%	98.8%
1.A.1. Energy industries-Biomass	N ₂ O	0.63	22.95	0.00	0.1%	98.8%
3.D.2.2 Indirect N ₂ O Emissions From Managed Soils - Nitrogen leaching and run-off	N ₂ O	375.24	293.99	0.00	0.1%	98.9%
1.A.3.b Road transportation	CH ₄	48.11	14.81	0.00	0.1%	99.0%
3.A. Enteric Fermentation - Others	CH ₄	118.06	66.74	0.00	0.1%	99.0%
1.A.4 Other sectors-Biomass	N ₂ O	12.97	27.63	0.00	0.1%	99.1%
5.B Biological Treatment of Solid Waste	CH ₄	4.04	20.44	0.00	0.1%	99.2%
4.B Cropland	N ₂ O	420.20	322.03	0.00	0.1%	99.2%
2. D Non-energy products from fuels and solvent use	CO ₂	65.87	62.62	0.00	0.0%	99.3%
1.A.1. Energy industries-Biomass	CH ₄	0.40	14.44	0.00	0.0%	99.3%
2.F.2 Foam Blowing Agents	HFCs	0.00	14.14	0.00	0.0%	99.4%
5.B Biological Treatment of Solid Waste	N ₂ O	2.89	14.62	0.00	0.0%	99.4%
4.D.2 Land converted to wetlands	CO ₂	0.00	12.30	0.00	0.0%	99.4%
4.A Forest land	N ₂ O	33.55	36.09	0.00	0.0%	99.5%
3.H Urea Application	CO ₂	35.68	15.72	0.00	0.0%	99.5%
1.A.1. Energy industries-Liquid fuels	N ₂ O	16.11	1.83	0.00	0.0%	99.5%
3.G Liming	CO ₂	20.59	24.71	0.00	0.0%	99.6%
2.C.1 Iron and Steel Production	CO ₂	16.98	2.60	0.00	0.0%	99.6%
1.A.1. Energy industries-Peat	CO ₂	11.06	17.63	0.00	0.0%	99.6%
1.A.3.c Railways	N ₂ O	40.92	20.36	0.00	0.0%	99.7%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.4 Other sectors-Solid fuels	N ₂ O	13.00	1.44	0.00	0.0%	99.7%
1.A.3.b Road transportation	N ₂ O	39.09	35.36	0.00	0.0%	99.7%
1.A.2 Manufacturing industries and construction-Peat	CO ₂	17.53	6.78	0.00	0.0%	99.7%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	8.06	0.14	0.00	0.0%	99.7%
2.F.4 Aerosols/metered dose inhalers	HFCs	0.85	6.20	0.00	0.0%	99.8%
4.B.2 Land converted to cropland- net carbon stock change in organic soils	CO ₂	133.17	102.05	0.00	0.0%	99.8%
2. E Electronic Industry	SF ₆ , NF ₃	0.00	5.05	0.00	0.0%	99.8%
1.A.4 Other sectors-Peat	CH ₄	1.12	4.91	0.00	0.0%	99.8%
1.A.1. Energy industries-Liquid fuels	CH ₄	6.90	0.93	0.00	0.0%	99.8%
1.A.3.a Domestic aviation	CO ₂	8.16	1.94	0.00	0.0%	99.8%
4.D Wetlands	N ₂ O	11.92	4.77	0.00	0.0%	99.8%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	0.60	4.08	0.00	0.0%	99.9%
1.B.2 Oil, natural gas and other emissions from energy production	CO ₂	0.63	4.01	0.00	0.0%	99.9%
5.D Wastewater Treatment and Discharge	N ₂ O	67.21	45.27	0.00	0.0%	99.9%
1.A.3.d Domestic Navigation	CO ₂	15.49	14.51	0.00	0.0%	99.9%
1.A.3.e Other transportation	CH ₄	4.30	0.38	0.00	0.0%	99.9%
1.A.4 Other sectors-Liquid fuels	CH ₄	4.17	0.46	0.00	0.0%	99.9%
1.A.2 Manufacturing industries and construction-Liquid fuels	CH ₄	3.38	0.06	0.00	0.0%	99.9%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	0.38	2.56	0.00	0.0%	99.9%
4.A.1 Forest land remaining forest land	CO ₂	4.28	5.37	0.00	0.0%	99.9%
2.F.3 Fire Protection	HFCs	0.00	2.15	0.00	0.0%	99.9%
1.A.4 Other sectors-Liquid fuels	N ₂ O	2.67	0.23	0.00	0.0%	99.9%
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	0.81	2.20	0.00	0.0%	100.0%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	0.26	1.79	0.00	0.0%	100.0%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	3.13	0.83	0.00	0.0%	100.0%
1.A.4 Other sectors-Gaseous fuels	CH ₄	3.13	1.04	0.00	0.0%	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.1. Energy industries-Gaseous fuels	CH ₄	2.63	0.70	0.00	0.0%	100.0%
2.G Other product manufacture and use	SF ₆	0.05	1.22	0.00	0.0%	100.0%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	992.77	721.16	0.00	0.0%	100.0%
2.A.3 Glass Production	CO ₂	11.70	7.41	0.00	0.0%	100.0%
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.00	0.90	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	0.45	1.23	0.00	0.0%	100.0%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.00	0.57	0.00	0.0%	100.0%
1.A.1. Energy industries-Solid fuels	N ₂ O	0.82	0.03	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	1.11	0.29	0.00	0.0%	100.0%
4.A Forest land	CH ₄	0.71	0.95	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.93	0.25	0.00	0.0%	100.0%
4.C Grassland	CH ₄	2.12	1.95	0.00	0.0%	100.0%
1.A.4 Other sectors-Peat	N ₂ O	0.11	0.44	0.00	0.0%	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.75	0.25	0.00	0.0%	100.0%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	10.94	8.19	0.00	0.0%	100.0%
1.A.3.c Railways	CH ₄	0.50	0.25	0.00	0.0%	100.0%
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.37	0.00	0.0%	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.05	0.08	0.00	0.0%	100.0%
1.A.3.a Domestic aviation	N ₂ O	0.07	0.02	0.00	0.0%	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.05	0.00	0.00	0.0%	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.13	0.12	0.00	0.0%	100.0%
5.C Incineration and Open Burning of Waste	CO ₂	2.66	1.96	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.08	0.03	0.00	0.0%	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.00	0.02	0.00	0.0%	100.0%
4.B Cropland	CH ₄	0.05	0.05	0.00	0.0%	100.0%
1.A.3.d Domestic Navigation	CH ₄	0.04	0.03	0.00	0.0%	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.01	0.00	0.00	0.0%	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	0.00	0.0%	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.08	0.06	0.00	0.0%	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	0.00	0.0%	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	0.00	0.0%	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CH ₄	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	0.00	0.0%	100.0%
2.B.8.a Methanol	CO ₂	24.35	0.00	0.00	0.0%	100.0%
2.B.8.a Methanol	CH ₄	5.24	0.00	0.00	0.0%	100.0%
4.E.1 Settlements remaining settlements	CO ₂	0.00	0.00	0.00	0.0%	100.0%
Total		43,540.93	10,847.53	1.07	1.00	

Approach 1 Trend Assessment for 2014 using a subset (LULUCF was excluded from analysis)

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.3.b Road transportation	CO ₂	5,247.15	4,547.12	0.32	16.8%	16.8%
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	6,021.25	151.42	0.30	15.6%	32.4%
2.B.1 Ammonia Production	CO ₂	1,255.82	1,875.12	0.18	9.4%	41.8%
1.A.2 Manufacturing industries and construction-Liquid fuels	CO ₂	3,500.92	75.49	0.17	9.2%	51.0%
1.A.4 Other sectors-Solid fuels	CO ₂	2,760.55	305.30	0.11	5.5%	56.5%
1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	5,806.05	1,532.96	0.11	5.5%	62.1%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,503.71	1,305.06	0.09	4.8%	66.9%
1.A.3.e Other transportation	CO ₂	1,764.11	236.35	0.06	3.3%	70.2%
5.A Solid Waste Disposal	CH ₄	1,028.83	834.33	0.06	2.9%	73.0%
1.A.2 Manufacturing industries and construction-Solid fuels	CO ₂	171.63	473.11	0.05	2.8%	75.8%
1.A.4 Other sectors-Liquid fuels	CO ₂	1,429.58	182.35	0.05	2.7%	78.5%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	992.77	721.16	0.04	2.2%	80.7%
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	139.12	353.56	0.04	2.0%	82.8%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	2.19	289.94	0.04	2.0%	84.8%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CO ₂	2,048.76	543.13	0.04	1.9%	86.7%
2.A.1 Cement Production	CO ₂	1,668.07	400.83	0.04	1.9%	88.6%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	260.55	276.55	0.02	1.2%	89.8%
3.D.2.2 Indirect N ₂ O Emissions From Managed Soils - Nitrogen leaching and run-off	N ₂ O	375.24	293.99	0.02	1.0%	90.7%
1.A.4 Other sectors-Biomass	CH ₄	70.28	150.36	0.02	0.8%	91.6%
1.A.4 Other sectors-Peat	CO ₂	27.13	109.04	0.01	0.7%	92.3%
1.A.4 Other sectors-Gaseous fuels	CO ₂	1,381.52	461.17	0.01	0.7%	92.9%
1.A.1. Energy industries-Other fossil fuels	CO ₂	0.00	82.56	0.01	0.6%	93.5%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
3.A.1 Enteric Fermentation - Cattle	CH ₄	4,101.48	1,570.66	0.01	0.6%	94.0%
2.A.4 Other process use of carbonates	CO ₂	239.52	17.46	0.01	0.5%	94.6%
1.A.1. Energy industries-Solid fuels	CO ₂	174.05	6.74	0.01	0.4%	95.0%
1.A.3.e Other transportation	N ₂ O	186.55	19.15	0.01	0.4%	95.4%
2.A.2 Lime Production	CO ₂	222.68	41.22	0.01	0.3%	95.7%
3.B.1.1 Manure Management - Cattle	CH ₄	247.40	137.58	0.00	0.3%	96.0%
1.A.4 Other sectors-Solid fuels	CH ₄	128.56	14.27	0.00	0.3%	96.2%
2. D Non-energy products from fuels and solvent use	CO ₂	65.87	62.62	0.00	0.2%	96.5%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	206.45	118.49	0.00	0.2%	96.7%
2.G Other product manufacture and use	N ₂ O	96.05	5.19	0.00	0.2%	97.0%
1.A.3.c Railways	CO ₂	349.97	174.13	0.00	0.2%	97.2%
3.B.1 Manure Management - Other	N ₂ O	109.48	12.34	0.00	0.2%	97.4%
2.B.2 Nitric Acid Production	N ₂ O	893.01	331.76	0.00	0.2%	97.6%
3.B.1.3 Manure Management - Swine	CH ₄	236.72	71.18	0.00	0.2%	97.8%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	414.53	190.08	0.00	0.2%	97.9%
1.A.1. Energy industries-Biomass	N ₂ O	0.63	22.95	0.00	0.2%	98.1%
1.A.4 Other sectors-Biomass	N ₂ O	12.97	27.63	0.00	0.2%	98.2%
1.A.3.b Road transportation	N ₂ O	39.09	35.36	0.00	0.1%	98.4%
3.A. Enteric Fermentation - Others	CH ₄	118.06	66.74	0.00	0.1%	98.5%
5.B Biological Treatment of Solid Waste	CH ₄	4.04	20.44	0.00	0.1%	98.6%
5.D Wastewater Treatment and Discharge	N ₂ O	67.21	45.27	0.00	0.1%	98.8%
3.G Liming	CO ₂	20.59	24.71	0.00	0.1%	98.9%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.1. Energy industries-Biomass	CH ₄	0.40	14.44	0.00	0.1%	99.0%
2.F.2 Foam Blowing Agents	HFCs	0.00	14.14	0.00	0.1%	99.1%
5.B Biological Treatment of Solid Waste	N ₂ O	2.89	14.62	0.00	0.1%	99.2%
1.A.1. Energy industries-Peat	CO ₂	11.06	17.63	0.00	0.1%	99.3%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	227.47	80.96	0.00	0.1%	99.3%
1.A.3.d Domestic Navigation	CO ₂	15.49	14.51	0.00	0.1%	99.4%
2.F.4 Aerosols/metered dose inhalers	HFCs	0.85	6.20	0.00	0.0%	99.4%
3.B.2 Manure Management - Cattle	N ₂ O	201.63	75.65	0.00	0.0%	99.5%
2. E Electronic Industry	SF ₆ , NF ₃	0.00	5.05	0.00	0.0%	99.5%
1.A.1. Energy industries-Liquid fuels	N ₂ O	16.11	1.83	0.00	0.0%	99.5%
1.A.3.b Road transportation	CH ₄	48.11	14.81	0.00	0.0%	99.6%
1.A.4 Other sectors-Peat	CH ₄	1.12	4.91	0.00	0.0%	99.6%
2.C.1 Iron and Steel Production	CO ₂	16.98	2.60	0.00	0.0%	99.6%
1.A.3.c Railways	N ₂ O	40.92	20.36	0.00	0.0%	99.7%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	0.60	4.08	0.00	0.0%	99.7%
1.A.4 Other sectors-Solid fuels	N ₂ O	13.00	1.44	0.00	0.0%	99.7%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	10.94	8.19	0.00	0.0%	99.7%
1.B.2 Oil, natural gas and other emissions from energy production	CO ₂	0.63	4.01	0.00	0.0%	99.8%
3.B.1 Manure Management - Other	CH ₄	75.24	27.10	0.00	0.0%	99.8%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	8.06	0.14	0.00	0.0%	99.8%
2.A.3 Glass Production	CO ₂	11.70	7.41	0.00	0.0%	99.8%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	0.38	2.56	0.00	0.0%	99.8%
2.F.3 Fire Protection	HFCs	0.00	2.15	0.00	0.0%	99.8%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	0.81	2.20	0.00	0.0%	99.9%
1.A.1. Energy industries-Liquid fuels	CH ₄	6.90	0.93	0.00	0.0%	99.9%
5.D Wastewater Treatment and Discharge	CH ₄	541.86	219.90	0.00	0.0%	99.9%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	0.26	1.79	0.00	0.0%	99.9%
3.H Urea Application	CO ₂	35.68	15.72	0.00	0.0%	99.9%
1.A.3.e Other transportation	CH ₄	4.30	0.38	0.00	0.0%	99.9%
1.A.3.a Domestic aviation	CO ₂	8.16	1.94	0.00	0.0%	99.9%
1.A.2 Manufacturing industries and construction-Liquid fuels	CH ₄	3.38	0.06	0.00	0.0%	99.9%
1.A.4 Other sectors-Liquid fuels	CH ₄	4.17	0.46	0.00	0.0%	99.9%
2.G Other product manufacture and use	SF ₆	0.05	1.22	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	0.45	1.23	0.00	0.0%	100.0%
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.00	0.90	0.00	0.0%	100.0%
5.C Incineration and Open Burning of Waste	CO ₂	2.66	1.96	0.00	0.0%	100.0%
1.A.4 Other sectors-Liquid fuels	N ₂ O	2.67	0.23	0.00	0.0%	100.0%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.00	0.57	0.00	0.0%	100.0%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	3.13	0.83	0.00	0.0%	100.0%
1.A.4 Other sectors-Peat	N ₂ O	0.11	0.44	0.00	0.0%	100.0%
1.A.1. Energy industries-Gaseous fuels	CH ₄	2.63	0.70	0.00	0.0%	100.0%
1.A.1. Energy industries-Solid fuels	N ₂ O	0.82	0.03	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Peat	CO ₂	17.53	6.78	0.00	0.0%	100.0%
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.37	0.00	0.0%	100.0%
1.A.4 Other sectors-Gaseous fuels	CH ₄	3.13	1.04	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	1.11	0.29	0.00	0.0%	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.93	0.25	0.00	0.0%	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.13	0.12	0.00	0.0%	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.05	0.08	0.00	0.0%	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.75	0.25	0.00	0.0%	100.0%
1.A.3.c Railways	CH ₄	0.50	0.25	0.00	0.0%	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.08	0.06	0.00	0.0%	100.0%
1.A.3.d Domestic Navigation	CH ₄	0.04	0.03	0.00	0.0%	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.00	0.02	0.00	0.0%	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.05	0.00	0.00	0.0%	100.0%
1.A.3.a Domestic aviation	N ₂ O	0.07	0.02	0.00	0.0%	100.0%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	317.91	127.96	0.00	0.0%	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	0.00	0.0%	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.08	0.03	0.00	0.0%	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.01	0.00	0.00	0.0%	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CH ₄	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	0.00	0.0%	100.0%
2.B.8.a Methanol	CO ₂	24.35	0.00	0.00	0.0%	100.0%
2.B.8.a Methanol	CH ₄	5.24	0.00	0.00	0.0%	100.0%
Total		47,084.06	18,950.68	1.91	1.00	

Approach 2 Level Assessment for 1990

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
4.B.2 Land converted to cropland - net carbon stock change in mineral soils	CO ₂	4,615.45	0.22	21.8%
4.A.1 Forest land remaining forest land - carbon stock change in biomass	CO ₂	-6,680.01	0.13	34.3%
4.C.2 Land converted to grassland - net carbon stock change in mineral soils	CO ₂	-2,082.10	0.10	44.1%
5.A Solid Waste Disposal	CH ₄	1,028.83	0.07	51.0%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	992.77	0.04	55.4%
3.A.1 Enteric Fermentation - Cattle	CH ₄	4,101.48	0.04	59.8%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	227.47	0.03	62.8%
5.D Wastewater Treatment and Discharge	CH ₄	541.86	0.03	65.4%
3.D.2.2 Indirect N ₂ O Emissions From Managed Soils - Nitrogen leaching and run-off	N ₂ O	375.24	0.02	67.9%
4.D.1 Wetlands remaining wetlands -net carbon stock change in organic soils	CO ₂	517.33	0.02	70.2%
4.A Forest land-4(II) organic soils	CO ₂	406.04	0.02	72.1%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	414.53	0.02	74.0%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	317.91	0.01	75.4%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	206.45	0.01	76.7%
4.A.2 Land converted to forest land - carbon stock change in biomass	CO ₂	-585.97	0.01	78.0%
1.A.4 Other sectors-Solid fuels	CO ₂	2,760.55	0.01	79.1%
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	6,021.25	0.01	80.1%
3.B.2 Manure Management - Cattle	N ₂ O	201.63	0.01	81.1%
1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	5,806.05	0.01	82.0%
4.B.1 Cropland remaining cropland - net carbon stock change in mineral soils	CO ₂	195.63	0.01	83.0%
4.A.2 Land converted to forest land - net carbon stock change in litter	CO ₂	-448.14	0.01	83.9%
4.A.1 Forest land remaining forest land - net carbon stock change in dead wood	CO ₂	-474.03	0.01	84.8%
4.B.1 Cropland remaining cropland - net carbon stock change in organic soils	CO ₂	178.17	0.01	85.6%
1.A.3.b Road transportation	CO ₂	5,247.15	0.01	86.4%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
1.A.3.e Other transportation	CO ₂	1,764.11	0.01	87.2%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	260.55	0.01	87.8%
4.B.2 Land converted to cropland- net carbon stock change in organic soils	CO ₂	133.17	0.01	88.5%
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	139.12	0.01	89.1%
4.B Cropland	N ₂ O	420.20	0.01	89.7%
1.A.2 Manufacturing industries and construction-Liquid fuels	CO ₂	3,500.92	0.01	90.3%
1.A.4 Other sectors-Biomass	CH ₄	70.28	0.01	90.9%
3.B.1 Manure Management - Other	N ₂ O	109.48	0.01	91.4%
1.A.3.e Other transportation	N ₂ O	186.55	0.00	91.9%
2.B.2 Nitric Acid Production	N ₂ O	893.01	0.00	92.4%
2.A.1 Cement Production	CO ₂	1,668.07	0.00	92.9%
4.B.2 Land converted to cropland- carbon stock change in biomass	CO ₂	98.41	0.00	93.3%
4.C.1 Grassland remaining grassland	CO ₂	80.81	0.00	93.7%
4.B.1 Cropland remaining cropland - carbon stock change in biomass	CO ₂	77.39	0.00	94.1%
2.A.2 Lime Production	CO ₂	222.68	0.00	94.4%
3.B.1.1 Manure Management - Cattle	CH ₄	247.40	0.00	94.8%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CO ₂	2,048.76	0.00	95.1%
3.B.1.3 Manure Management - Swine	CH ₄	236.72	0.00	95.5%
1.A.4 Other sectors-Solid fuels	CH ₄	128.56	0.00	95.8%
4.G Harvested wood products	CO ₂	-95.65	0.00	96.1%
4.A Forest land	N ₂ O	33.55	0.00	96.4%
1.A.4 Other sectors-Liquid fuels	CO ₂	1,429.58	0.00	96.7%
1.A.4 Other sectors-Gaseous fuels	CO ₂	1,381.52	0.00	97.0%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,503.71	0.00	97.3%
2.G Other product manufacture and use	N ₂ O	96.05	0.00	97.5%
4.C.2 Land converted to grassland- net carbon stock change in organic soils	CO ₂	45.06	0.00	97.7%
2.B.1 Ammonia Production	CO ₂	1,255.82	0.00	97.9%
5.D Wastewater Treatment and Discharge	N ₂ O	67.21	0.00	98.1%
1.A.3.b Road transportation	CH ₄	48.11	0.00	98.3%
1.A.3.c Railways	N ₂ O	40.92	0.00	98.5%
1.A.3.c Railways	CO ₂	349.97	0.00	98.6%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
3.A. Enteric Fermentation - Others	CH ₄	118.06	0.00	98.7%
3.H Urea Application	CO ₂	35.68	0.00	98.8%
3.B.1 Manure Management - Other	CH ₄	75.24	0.00	98.9%
1.A.4 Other sectors-Biomass	N ₂ O	12.97	0.00	99.0%
1.A.3.b Road transportation	N ₂ O	39.09	0.00	99.1%
2. D Non-energy products from fuels and solvent use	CO ₂	65.87	0.00	99.2%
2.A.4 Other process use of carbonates	CO ₂	239.52	0.00	99.3%
4.D Wetlands	N ₂ O	11.92	0.00	99.4%
1.A.1. Energy industries-Solid fuels	CO ₂	174.05	0.00	99.5%
1.A.2 Manufacturing industries and construction-Solid fuels	CO ₂	171.63	0.00	99.5%
3.G Liming	CO ₂	20.59	0.00	99.6%
1.A.1. Energy industries-Liquid fuels	N ₂ O	16.11	0.00	99.6%
2.B.8.a Methanol	CO ₂	24.35	0.00	99.7%
1.A.4 Other sectors-Solid fuels	N ₂ O	13.00	0.00	99.7%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	10.94	0.00	99.7%
5.B Biological Treatment of Solid Waste	CH ₄	4.04	0.00	99.7%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	8.06	0.00	99.8%
1.A.1. Energy industries-Liquid fuels	CH ₄	6.90	0.00	99.8%
5.B Biological Treatment of Solid Waste	N ₂ O	2.89	0.00	99.8%
2.C.1 Iron and Steel Production	CO ₂	16.98	0.00	99.8%
1.A.4 Other sectors-Liquid fuels	CH ₄	4.17	0.00	99.8%
1.A.4 Other sectors-Peat	CO ₂	27.13	0.00	99.8%
5.C Incineration and Open Burning of Waste	CO ₂	2.66	0.00	99.8%
4.C Grassland	N ₂ O	2.49	0.00	99.9%
1.A.2 Manufacturing industries and construction-Liquid fuels	CH ₄	3.38	0.00	99.9%
1.A.3.e Other transportation	CH ₄	4.30	0.00	99.9%
2.B.8.a Methanol	CH ₄	5.24	0.00	99.9%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	3.13	0.00	99.9%
1.A.4 Other sectors-Gaseous fuels	CH ₄	3.13	0.00	99.9%
4.A.1 Forest land remaining forest land	CO ₂	4.28	0.00	99.9%
4.C Grassland	CH ₄	2.12	0.00	99.9%
1.A.4 Other sectors-Liquid fuels	N ₂ O	2.67	0.00	99.9%
1.A.1. Energy industries-Gaseous fuels	CH ₄	2.63	0.00	99.9%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
1.A.2 Manufacturing industries and construction-Peat	CO ₂	17.53	0.00	99.9%
2.A.3 Glass Production	CO ₂	11.70	0.00	99.9%
1.A.1. Energy industries-Biomass	N ₂ O	0.63	0.00	99.9%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	0.60	0.00	100.0%
1.A.3.d Domestic Navigation	CO ₂	15.49	0.00	100.0%
1.A.3.a Domestic aviation	CO ₂	8.16	0.00	100.0%
1.A.1. Energy industries-Peat	CO ₂	11.06	0.00	100.0%
1.A.1. Energy industries-Biomass	CH ₄	0.40	0.00	100.0%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	0.38	0.00	100.0%
1.A.4 Other sectors-Peat	CH ₄	1.12	0.00	100.0%
4.A Forest land	CH ₄	0.71	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	1.11	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	CO ₂	0.63	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.93	0.00	100.0%
1.A.1. Energy industries-Solid fuels	N ₂ O	0.82	0.00	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	0.81	0.00	100.0%
1.A.3.c Railways	CH ₄	0.50	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.75	0.00	100.0%
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.00	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	0.45	0.00	100.0%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	0.26	0.00	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.13	0.00	100.0%
1.A.3.a Domestic aviation	N ₂ O	0.07	0.00	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.08	0.00	100.0%
1.A.4 Other sectors-Peat	N ₂ O	0.11	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.08	0.00	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.05	0.00	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.05	0.00	100.0%
1.A.3.d Domestic Navigation	CH ₄	0.04	0.00	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
4.B Cropland	CH ₄	0.05	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.01	0.00	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.00	0.00	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
2. E Electronic Industry	SF ₆ , NF ₃	0.00	0.00	100.0%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	0.00	0.00	100.0%
2.F.2 Foam Blowing Agents	HFCs	0.00	0.00	100.0%
2.F.3 Fire Protection	HFCs	0.00	0.00	100.0%
2.F.4 Aerosols/metered dose inhalers	HFCs	0.00	0.00	100.0%
2.G Other product manufacture and use	SF ₆	0.00	0.00	100.0%
4.D.2 Land converted to wetlands	CO ₂	0.00	0.00	100.0%
4.E.1 Settlements remaining settlements	CO ₂	0.00	0.00	100.0%
4.E.2 Land converted to settlements	CO ₂	0.00	0.00	100.0%
4.F Other land	CO ₂	0.00	0.00	100.0%
Total		45,527.84		

Approach 2 Level Assessment for 1990 using a subset (LULUCF was excluded from analysis)

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
5.A Solid Waste Disposal	CH ₄	1,028.83	0.16	15.7%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	992.77	0.10	25.9%
3.A.1 Enteric Fermentation - Cattle	CH ₄	4,101.48	0.10	36.1%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	227.47	0.07	42.8%
5.D Wastewater Treatment and Discharge	CH ₄	541.86	0.06	48.9%
3.D.2.2 Indirect N ₂ O Emissions From Managed Soils - Nitrogen leaching and run-off	N ₂ O	375.24	0.06	54.6%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	414.53	0.04	58.9%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	317.91	0.03	62.2%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	206.45	0.03	65.3%
1.A.4 Other sectors-Solid fuels	CO ₂	2,760.55	0.03	67.9%
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	6,021.25	0.02	70.2%
3.B.2 Manure Management - Cattle	N ₂ O	201.63	0.02	72.5%
1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	5,806.05	0.02	74.7%
1.A.3.b Road transportation	CO ₂	5,247.15	0.02	76.5%
1.A.3.e Other transportation	CO ₂	1,764.11	0.02	78.3%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	260.55	0.02	79.8%
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	139.12	0.01	81.3%
1.A.2 Manufacturing industries and construction-Liquid fuels	CO ₂	3,500.92	0.01	82.6%
1.A.4 Other sectors-Biomass	CH ₄	70.28	0.01	84.0%
3.B.1 Manure Management - Other	N ₂ O	109.48	0.01	85.2%
1.A.3.e Other transportation	N ₂ O	186.55	0.01	86.3%
2.B.2 Nitric Acid Production	N ₂ O	893.01	0.01	87.4%
2.A.1 Cement Production	CO ₂	1,668.07	0.01	88.5%
2.A.2 Lime Production	CO ₂	222.68	0.01	89.3%
3.B.1.1 Manure Management - Cattle	CH ₄	247.40	0.01	90.2%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CO ₂	2,048.76	0.01	91.0%
3.B.1.3 Manure Management - Swine	CH ₄	236.72	0.01	91.7%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
1.A.4 Other sectors-Solid fuels	CH ₄	128.56	0.01	92.5%
1.A.4 Other sectors-Liquid fuels	CO ₂	1,429.58	0.01	93.2%
1.A.4 Other sectors-Gaseous fuels	CO ₂	1,381.52	0.01	93.8%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,503.71	0.01	94.4%
2.G Other product manufacture and use	N ₂ O	96.05	0.00	94.9%
2.B.1 Ammonia Production	CO ₂	1,255.82	0.00	95.4%
5.D Wastewater Treatment and Discharge	N ₂ O	67.21	0.00	95.9%
1.A.3.b Road transportation	CH ₄	48.11	0.00	96.3%
1.A.3.c Railways	N ₂ O	40.92	0.00	96.7%
1.A.3.c Railways	CO ₂	349.97	0.00	97.0%
3.A. Enteric Fermentation - Others	CH ₄	118.06	0.00	97.3%
3.H Urea Application	CO ₂	35.68	0.00	97.5%
3.B.1 Manure Management - Other	CH ₄	75.24	0.00	97.8%
1.A.4 Other sectors-Biomass	N ₂ O	12.97	0.00	98.0%
1.A.3.b Road transportation	N ₂ O	39.09	0.00	98.3%
2. D Non-energy products from fuels and solvent use	CO ₂	65.87	0.00	98.5%
2.A.4 Other process use of carbonates	CO ₂	239.52	0.00	98.7%
1.A.1. Energy industries-Solid fuels	CO ₂	174.05	0.00	98.8%
1.A.2 Manufacturing industries and construction-Solid fuels	CO ₂	171.63	0.00	99.0%
3.G Liming	CO ₂	20.59	0.00	99.1%
1.A.1. Energy industries-Liquid fuels	N ₂ O	16.11	0.00	99.2%
2.B.8.a Methanol	CO ₂	24.35	0.00	99.3%
1.A.4 Other sectors-Solid fuels	N ₂ O	13.00	0.00	99.4%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	10.94	0.00	99.4%
5.B Biological Treatment of Solid Waste	CH ₄	4.04	0.00	99.5%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	8.06	0.00	99.5%
1.A.1. Energy industries-Liquid fuels	CH ₄	6.90	0.00	99.6%
5.B Biological Treatment of Solid Waste	N ₂ O	2.89	0.00	99.6%
2.C.1 Iron and Steel Production	CO ₂	16.98	0.00	99.6%
1.A.4 Other sectors-Liquid fuels	CH ₄	4.17	0.00	99.7%
1.A.4 Other sectors-Peat	CO ₂	27.13	0.00	99.7%
5.C Incineration and Open Burning of Waste	CO ₂	2.66	0.00	99.7%
1.A.2 Manufacturing industries and construction-Liquid fuels	CH ₄	3.38	0.00	99.7%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
1.A.3.e Other transportation	CH ₄	4.30	0.00	99.8%
2.B.8.a Methanol	CH ₄	5.24	0.00	99.8%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	3.13	0.00	99.8%
1.A.4 Other sectors-Gaseous fuels	CH ₄	3.13	0.00	99.8%
1.A.4 Other sectors-Liquid fuels	N ₂ O	2.67	0.00	99.8%
1.A.1. Energy industries-Gaseous fuels	CH ₄	2.63	0.00	99.8%
1.A.2 Manufacturing industries and construction-Peat	CO ₂	17.53	0.00	99.9%
2.A.3 Glass Production	CO ₂	11.70	0.00	99.9%
1.A.1. Energy industries-Biomass	N ₂ O	0.63	0.00	99.9%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	0.60	0.00	99.9%
1.A.3.d Domestic Navigation	CO ₂	15.49	0.00	99.9%
1.A.3.a Domestic aviation	CO ₂	8.16	0.00	99.9%
1.A.1. Energy industries-Peat	CO ₂	11.06	0.00	99.9%
1.A.1. Energy industries-Biomass	CH ₄	0.40	0.00	99.9%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	0.38	0.00	99.9%
1.A.4 Other sectors-Peat	CH ₄	1.12	0.00	99.9%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	1.11	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	CO ₂	0.63	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.93	0.00	100.0%
1.A.1. Energy industries-Solid fuels	N ₂ O	0.82	0.00	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	0.81	0.00	100.0%
1.A.3.c Railways	CH ₄	0.50	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.75	0.00	100.0%
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.00	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	0.45	0.00	100.0%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	0.26	0.00	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.13	0.00	100.0%
1.A.3.a Domestic aviation	N ₂ O	0.07	0.00	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.08	0.00	100.0%
1.A.4 Other sectors-Peat	N ₂ O	0.11	0.00	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.08	0.00	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.05	0.00	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.05	0.00	100.0%
1.A.3.d Domestic Navigation	CH ₄	0.04	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.01	0.00	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.00	0.00	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
2. E Electronic Industry	SF ₆ , NF ₃	0.00	0.00	100.0%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	0.00	0.00	100.0%
2.F.2 Foam Blowing Agents	HFCs	0.00	0.00	100.0%
2.F.3 Fire Protection	HFCs	0.00	0.00	100.0%
2.F.4 Aerosols/metered dose inhalers	HFCs	0.00	0.00	100.0%
2.G Other product manufacture and use	SF ₆	0.00	0.00	100.0%
Total		47,080.98		

Approach 2 Level Assessment for 2014

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
4.B.2 Land converted to cropland - net carbon stock change in mineral soils	CO ₂	3,525.13	0.18	18.1%
4.A.1 Forest land remaining forest land - carbon stock change in biomass	CO ₂	-8,447.64	0.17	35.2%
4.C.2 Land converted to grassland - net carbon stock change in mineral soils	CO ₂	-2,830.85	0.15	49.7%
5.A Solid Waste Disposal	CH ₄	834.33	0.06	55.7%
4.G Harvested wood products	CO ₂	-1,399.35	0.05	60.6%
4.D.1 Wetlands remaining wetlands -net carbon stock change in organic soils	CO ₂	875.20	0.04	64.7%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	721.16	0.04	68.2%
4.A Forest land-4(II) organic soils	CO ₂	432.78	0.02	70.4%
3.D.2.2 Indirect N ₂ O Emissions From Managed Soils - Nitrogen leaching and run-off	N ₂ O	293.99	0.02	72.5%
3.A.1 Enteric Fermentation - Cattle	CH ₄	1,570.66	0.02	74.4%
4.B.2 Land converted to cropland- carbon stock change in biomass	CO ₂	349.73	0.02	76.2%
4.E.2 Land converted to settlements	CO ₂	372.65	0.02	77.9%
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	353.56	0.02	79.6%
4.A.2 Land converted to forest land - carbon stock change in biomass	CO ₂	-678.70	0.02	81.1%
1.A.4 Other sectors-Biomass	CH ₄	150.36	0.01	82.5%
4.A.1 Forest land remaining forest land - net carbon stock change in dead wood	CO ₂	-600.29	0.01	83.7%
5.D Wastewater Treatment and Discharge	CH ₄	219.90	0.01	84.9%
4.A.2 Land converted to forest land - net carbon stock change in litter	CO ₂	-516.68	0.01	86.0%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	80.96	0.01	87.2%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	190.08	0.01	88.1%
4.B.1 Cropland remaining cropland - net carbon stock change in organic soils	CO ₂	174.33	0.01	89.0%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	118.49	0.01	89.8%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	276.55	0.01	90.6%
1.A.3.b Road transportation	CO ₂	4,547.12	0.01	91.4%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	127.96	0.01	92.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
4.B.2 Land converted to cropland- net carbon stock change in organic soils	CO ₂	102.05	0.01	92.5%
4.B Cropland	N ₂ O	322.03	0.01	93.0%
4.C.1 Grassland remaining grassland	CO ₂	81.96	0.00	93.4%
3.B.2 Manure Management - Cattle	N ₂ O	75.65	0.00	93.8%
4.A Forest land	N ₂ O	36.09	0.00	94.2%
2.B.1 Ammonia Production	CO ₂	1,875.12	0.00	94.5%
4.C.2 Land converted to grassland- net carbon stock change in organic soils	CO ₂	63.87	0.00	94.9%
1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	1,532.96	0.00	95.2%
4.B.1 Cropland remaining cropland - net carbon stock change in mineral soils	CO ₂	-53.90	0.00	95.4%
4.F Other land	CO ₂	50.11	0.00	95.7%
1.A.4 Other sectors-Biomass	N ₂ O	27.63	0.00	95.9%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	289.94	0.00	96.2%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,305.06	0.00	96.4%
3.B.1.1 Manure Management - Cattle	CH ₄	137.58	0.00	96.6%
1.A.1. Energy industries-Biomass	N ₂ O	22.95	0.00	96.8%
1.A.2 Manufacturing industries and construction-Solid fuels	CO ₂	473.11	0.00	97.0%
2.B.2 Nitric Acid Production	N ₂ O	331.76	0.00	97.2%
5.D Wastewater Treatment and Discharge	N ₂ O	45.27	0.00	97.4%
1.A.4 Other sectors-Solid fuels	CO ₂	305.30	0.00	97.5%
1.A.1. Energy industries-Biomass	CH ₄	14.44	0.00	97.6%
5.B Biological Treatment of Solid Waste	CH ₄	20.44	0.00	97.8%
2.A.1 Cement Production	CO ₂	400.83	0.00	97.9%
1.A.3.e Other transportation	CO ₂	236.35	0.00	98.0%
3.B.1.3 Manure Management - Swine	CH ₄	71.18	0.00	98.1%
4.C Grassland	N ₂ O	26.30	0.00	98.2%
2. D Non-energy products from fuels and solvent use	CO ₂	62.62	0.00	98.3%
1.A.4 Other sectors-Gaseous fuels	CO ₂	461.17	0.00	98.4%
1.A.3.b Road transportation	N ₂ O	35.36	0.00	98.5%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CO ₂	543.13	0.00	98.6%
5.B Biological Treatment of Solid Waste	N ₂ O	14.62	0.00	98.7%
1.A.3.c Railways	N ₂ O	20.36	0.00	98.8%
3.A. Enteric Fermentation - Others	CH ₄	66.74	0.00	98.9%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
2.A.2 Lime Production	CO ₂	41.22	0.00	98.9%
3.G Liming	CO ₂	24.71	0.00	99.0%
1.A.3.c Railways	CO ₂	174.13	0.00	99.1%
4.B.1 Cropland remaining cropland - carbon stock change in biomass	CO ₂	-13.37	0.00	99.1%
1.A.3.b Road transportation	CH ₄	14.81	0.00	99.2%
3.B.1 Manure Management - Other	N ₂ O	12.34	0.00	99.3%
4.D.2 Land converted to wetlands	CO ₂	12.30	0.00	99.3%
1.A.3.e Other transportation	N ₂ O	19.15	0.00	99.4%
3.H Urea Application	CO ₂	15.72	0.00	99.4%
1.A.4 Other sectors-Peat	CO ₂	109.04	0.00	99.5%
3.B.1 Manure Management - Other	CH ₄	27.10	0.00	99.5%
1.A.4 Other sectors-Solid fuels	CH ₄	14.27	0.00	99.6%
1.A.4 Other sectors-Liquid fuels	CO ₂	182.35	0.00	99.6%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	4.08	0.00	99.7%
2.F.2 Foam Blowing Agents	HFCs	14.14	0.00	99.7%
1.A.1. Energy industries-Other fossil fuels	CO ₂	82.56	0.00	99.7%
4.D Wetlands	N ₂ O	4.77	0.00	99.7%
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	151.42	0.00	99.8%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	8.19	0.00	99.8%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	2.56	0.00	99.8%
1.B.2 Oil, natural gas and other emissions from energy production	CO ₂	4.01	0.00	99.8%
1.A.4 Other sectors-Peat	CH ₄	4.91	0.00	99.9%
1.A.2 Manufacturing industries and construction-Liquid fuels	CO ₂	75.49	0.00	99.9%
2.G Other product manufacture and use	N ₂ O	5.19	0.00	99.9%
4.A.1 Forest land remaining forest land	CO ₂	5.37	0.00	99.9%
5.C Incineration and Open Burning of Waste	CO ₂	1.96	0.00	99.9%
4.C Grassland	CH ₄	1.95	0.00	99.9%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	1.79	0.00	99.9%
1.A.1. Energy industries-Peat	CO ₂	17.63	0.00	99.9%
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	2.20	0.00	99.9%
2.A.4 Other process use of carbonates	CO ₂	17.46	0.00	99.9%
1.A.1. Energy industries-Liquid fuels	N ₂ O	1.83	0.00	99.9%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
1.A.3.d Domestic Navigation	CO ₂	14.51	0.00	99.9%
4.A Forest land	CH ₄	0.95	0.00	99.9%
1.A.4 Other sectors-Solid fuels	N ₂ O	1.44	0.00	100.0%
2.A.3 Glass Production	CO ₂	7.41	0.00	100.0%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	1.23	0.00	100.0%
2.F.3 Fire Protection	HFCs	2.15	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	CH ₄	1.04	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	CO ₂	6.78	0.00	100.0%
1.A.1. Energy industries-Solid fuels	CO ₂	6.74	0.00	100.0%
1.A.1. Energy industries-Liquid fuels	CH ₄	0.93	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.90	0.00	100.0%
2.F.4 Aerosols/metered dose inhalers	HFCs	6.20	0.00	100.0%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	0.83	0.00	100.0%
2.C.1 Iron and Steel Production	CO ₂	2.60	0.00	100.0%
1.A.1. Energy industries-Gaseous fuels	CH ₄	0.70	0.00	100.0%
2. E Electronic Industry	SF ₆ , NF ₃	5.05	0.00	100.0%
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.57	0.00	100.0%
1.A.4 Other sectors-Liquid fuels	CH ₄	0.46	0.00	100.0%
1.A.4 Other sectors-Peat	N ₂ O	0.44	0.00	100.0%
1.A.3.a Domestic aviation	CO ₂	1.94	0.00	100.0%
1.A.3.c Railways	CH ₄	0.25	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	0.29	0.00	100.0%
1.A.3.e Other transportation	CH ₄	0.38	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.25	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.25	0.00	100.0%
1.A.4 Other sectors-Liquid fuels	N ₂ O	0.23	0.00	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.12	0.00	100.0%
2.G Other product manufacture and use	SF ₆	1.22	0.00	100.0%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	0.14	0.00	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.06	0.00	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.08	0.00	100.0%
1.A.2 Manufacturing industries and construction-Liquid	CH ₄	0.06	0.00	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
fuels				
1.A.3.a Domestic aviation	N ₂ O	0.02	0.00	100.0%
1.A.3.d Domestic Navigation	CH ₄	0.03	0.00	100.0%
1.A.1. Energy industries-Solid fuels	N ₂ O	0.03	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.03	0.00	100.0%
4.B Cropland	CH ₄	0.05	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.02	0.00	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.00	0.00	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
2.B.8.a Methanol	CO ₂	0.00	0.00	100.0%
2.B.8.a Methanol	CH ₄	0.00	0.00	100.0%
4.E.1 Settlements remaining settlements	CO ₂	0.00	0.00	100.0%
Total		10,847.53		

Approach 2 Level Assessment for 2014 using a subset (LULUCF was excluded from analysis)

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
5.A Solid Waste Disposal	CH ₄	834.33	0.22	21.6%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	721.16	0.13	34.2%
3.D.2.2 Indirect N ₂ O Emissions From Managed Soils - Nitrogen leaching and run-off	N ₂ O	293.99	0.08	41.8%
3.A.1 Enteric Fermentation - Cattle	CH ₄	1,570.66	0.07	48.4%
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	353.56	0.06	54.6%
1.A.4 Other sectors-Biomass	CH ₄	150.36	0.05	59.5%
5.D Wastewater Treatment and Discharge	CH ₄	219.90	0.04	63.7%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	80.96	0.04	67.7%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	190.08	0.03	71.1%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	118.49	0.03	74.1%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	276.55	0.03	77.0%
1.A.3.b Road transportation	CO ₂	4,547.12	0.03	79.6%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	127.96	0.02	81.8%
3.B.2 Manure Management - Cattle	N ₂ O	75.65	0.01	83.3%
2.B.1 Ammonia Production	CO ₂	1,875.12	0.01	84.5%
1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	1,532.96	0.01	85.5%
1.A.4 Other sectors-Biomass	N ₂ O	27.63	0.01	86.4%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	289.94	0.01	87.3%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,305.06	0.01	88.1%
3.B.1.1 Manure Management - Cattle	CH ₄	137.58	0.01	88.9%
1.A.1. Energy industries-Biomass	N ₂ O	22.95	0.01	89.6%
1.A.2 Manufacturing industries and construction-Solid fuels	CO ₂	473.11	0.01	90.3%
2.B.2 Nitric Acid Production	N ₂ O	331.76	0.01	91.0%
5.D Wastewater Treatment and Discharge	N ₂ O	45.27	0.01	91.6%
1.A.4 Other sectors-Solid fuels	CO ₂	305.30	0.00	92.0%
1.A.1. Energy industries-Biomass	CH ₄	14.44	0.00	92.5%
5.B Biological Treatment of Solid Waste	CH ₄	20.44	0.00	92.9%
2.A.1 Cement Production	CO ₂	400.83	0.00	93.4%
1.A.3.e Other transportation	CO ₂	236.35	0.00	93.8%
3.B.1.3 Manure Management - Swine	CH ₄	71.18	0.00	94.2%
2. D Non-energy products from fuels and solvent use	CO ₂	62.62	0.00	94.6%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
1.A.4 Other sectors-Gaseous fuels	CO ₂	461.17	0.00	94.9%
1.A.3.b Road transportation	N ₂ O	35.36	0.00	95.3%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CO ₂	543.13	0.00	95.6%
5.B Biological Treatment of Solid Waste	N ₂ O	14.62	0.00	96.0%
1.A.3.c Railways	N ₂ O	20.36	0.00	96.3%
3.A. Enteric Fermentation - Others	CH ₄	66.74	0.00	96.6%
2.A.2 Lime Production	CO ₂	41.22	0.00	96.8%
3.G Liming	CO ₂	24.71	0.00	97.1%
1.A.3.c Railways	CO ₂	174.13	0.00	97.3%
1.A.3.b Road transportation	CH ₄	14.81	0.00	97.6%
3.B.1 Manure Management - Other	N ₂ O	12.34	0.00	97.8%
1.A.3.e Other transportation	N ₂ O	19.15	0.00	98.0%
3.H Urea Application	CO ₂	15.72	0.00	98.2%
1.A.4 Other sectors-Peat	CO ₂	109.04	0.00	98.4%
3.B.1 Manure Management - Other	CH ₄	27.10	0.00	98.5%
1.A.4 Other sectors-Solid fuels	CH ₄	14.27	0.00	98.7%
1.A.4 Other sectors-Liquid fuels	CO ₂	182.35	0.00	98.8%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	4.08	0.00	98.9%
2.F.2 Foam Blowing Agents	HFCs	14.14	0.00	99.1%
1.A.1. Energy industries-Other fossil fuels	CO ₂	82.56	0.00	99.2%
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	151.42	0.00	99.3%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	8.19	0.00	99.4%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	2.56	0.00	99.4%
1.B.2 Oil, natural gas and other emissions from energy production	CO ₂	4.01	0.00	99.5%
1.A.4 Other sectors-Peat	CH ₄	4.91	0.00	99.5%
1.A.2 Manufacturing industries and construction-Liquid fuels	CO ₂	75.49	0.00	99.6%
2.G Other product manufacture and use	N ₂ O	5.19	0.00	99.6%
5.C Incineration and Open Burning of Waste	CO ₂	1.96	0.00	99.7%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	1.79	0.00	99.7%
1.A.1. Energy industries-Peat	CO ₂	17.63	0.00	99.7%
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	2.20	0.00	99.7%
2.A.4 Other process use of carbonates	CO ₂	17.46	0.00	99.8%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
1.A.1. Energy industries-Liquid fuels	N ₂ O	1.83	0.00	99.8%
1.A.3.d Domestic Navigation	CO ₂	14.51	0.00	99.8%
1.A.4 Other sectors-Solid fuels	N ₂ O	1.44	0.00	99.8%
2.A.3 Glass Production	CO ₂	7.41	0.00	99.8%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	1.23	0.00	99.8%
2.F.3 Fire Protection	HFCs	2.15	0.00	99.9%
1.A.4 Other sectors-Gaseous fuels	CH ₄	1.04	0.00	99.9%
1.A.2 Manufacturing industries and construction-Peat	CO ₂	6.78	0.00	99.9%
1.A.1. Energy industries-Solid fuels	CO ₂	6.74	0.00	99.9%
1.A.1. Energy industries-Liquid fuels	CH ₄	0.93	0.00	99.9%
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.90	0.00	99.9%
2.F.4 Aerosols/metered dose inhalers	HFCs	6.20	0.00	99.9%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	0.83	0.00	99.9%
2.C.1 Iron and Steel Production	CO ₂	2.60	0.00	99.9%
1.A.1. Energy industries-Gaseous fuels	CH ₄	0.70	0.00	99.9%
2. E Electronic Industry	SF ₆ , NF ₃	5.05	0.00	99.9%
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.00	100.0%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.57	0.00	100.0%
1.A.4 Other sectors-Liquid fuels	CH ₄	0.46	0.00	100.0%
1.A.4 Other sectors-Peat	N ₂ O	0.44	0.00	100.0%
1.A.3.a Domestic aviation	CO ₂	1.94	0.00	100.0%
1.A.3.c Railways	CH ₄	0.25	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	0.29	0.00	100.0%
1.A.3.e Other transportation	CH ₄	0.38	0.00	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.25	0.00	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.25	0.00	100.0%
1.A.4 Other sectors-Liquid fuels	N ₂ O	0.23	0.00	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.12	0.00	100.0%
2.G Other product manufacture and use	SF ₆	1.22	0.00	100.0%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	0.14	0.00	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.06	0.00	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.08	0.00	100.0%
1.A.2 Manufacturing industries and construction-Liquid fuels	CH ₄	0.06	0.00	100.0%
1.A.3.a Domestic aviation	N ₂ O	0.02	0.00	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>GHG emissions, kt CO₂ eqv.</i>	<i>Level assessment with uncertainty</i>	<i>Cumulative total</i>
1.A.3.d Domestic Navigation	CH ₄	0.03	0.00	100.0%
1.A.1. Energy industries-Solid fuels	N ₂ O	0.03	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.03	0.00	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.02	0.00	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.00	0.00	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CH ₄	0.00	0.00	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	100.0%
2.B.8.a Methanol	CO ₂	0.00	0.00	100.0%
2.B.8.a Methanol	CH ₄	0.00	0.00	100.0%
Total		18,950.68		

Approach 2 Trend Assessment for 2014

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment with uncertainty</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
4.A.1 Forest land remaining forest land - carbon stock change in biomass	CO ₂	-6,680.01	-8,447.64	0.06	17.3%	17.3%
4.C.2 Land converted to grassland - net carbon stock change in mineral soils	CO ₂	-2,082.10	-2,830.85	0.06	15.6%	33.0%
4.G Harvested wood products	CO ₂	-95.65	-1,399.35	0.03	9.2%	42.2%
4.B.2 Land converted to cropland - net carbon stock change in mineral soils	CO ₂	4,615.45	3,525.13	0.02	6.7%	48.9%
4.D.1 Wetlands remaining wetlands -net carbon stock change in organic soils	CO ₂	517.33	875.20	0.02	5.2%	54.0%
4.E.2 Land converted to settlements	CO ₂	0.00	372.65	0.01	3.5%	57.5%
4.B.2 Land converted to cropland- carbon stock change in biomass	CO ₂	98.41	349.73	0.01	2.9%	60.4%
5.A Solid Waste Disposal	CH ₄	1,028.83	834.33	0.01	2.8%	63.2%
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	139.12	353.56	0.01	2.6%	65.8%
3.A.1 Enteric Fermentation - Cattle	CH ₄	4,101.48	1,570.66	0.01	2.3%	68.1%
1.A.4 Other sectors-Biomass	CH ₄	70.28	150.36	0.01	1.9%	70.0%
4.A Forest land-4(II) organic soils	CO ₂	406.04	432.78	0.01	1.8%	71.8%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	227.47	80.96	0.01	1.7%	73.5%
4.A.2 Land converted to forest land - carbon stock change in biomass	CO ₂	-585.97	-678.70	0.00	1.4%	74.9%
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	6,021.25	151.42	0.00	1.3%	76.2%
4.A.1 Forest land remaining forest land - net carbon stock change in dead wood	CO ₂	-474.03	-600.29	0.00	1.2%	77.5%
5.D Wastewater Treatment and Discharge	CH ₄	541.86	219.90	0.00	1.2%	78.7%
1.A.4 Other sectors-Solid fuels	CO ₂	2,760.55	305.30	0.00	1.2%	79.9%
4.A.2 Land converted to forest land - net carbon stock change in litter	CO ₂	-448.14	-516.68	0.00	1.1%	81.0%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	992.77	721.16	0.00	1.0%	82.0%
3.D.2.2 Indirect N ₂ O Emissions From Managed Soils - Nitrogen leaching and run-off	N ₂ O	375.24	293.99	0.00	0.9%	82.8%
1.A.3.e Other transportation	CO ₂	1,764.11	236.35	0.00	0.8%	83.6%
1.A.2 Manufacturing industries and construction-Liquid fuels	CO ₂	3,500.92	75.49	0.00	0.8%	84.4%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment with uncertainty</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	5,806.05	1,532.96	0.00	0.8%	85.1%
4.B.1 Cropland remaining cropland - net carbon stock change in mineral soils	CO ₂	195.63	-53.90	0.00	0.7%	85.8%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	317.91	127.96	0.00	0.7%	86.5%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	414.53	190.08	0.00	0.7%	87.2%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	260.55	276.55	0.00	0.7%	87.8%
4.B.1 Cropland remaining cropland - net carbon stock change in organic soils	CO ₂	178.17	174.33	0.00	0.6%	88.5%
3.B.1 Manure Management - Other	N ₂ O	109.48	12.34	0.00	0.6%	89.0%
1.A.3.e Other transportation	N ₂ O	186.55	19.15	0.00	0.6%	89.6%
3.B.2 Manure Management - Cattle	N ₂ O	201.63	75.65	0.00	0.5%	90.1%
4.F Other land	CO ₂	0.00	50.11	0.00	0.5%	90.6%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	2.19	289.94	0.00	0.5%	91.1%
1.A.3.b Road transportation	CO ₂	5,247.15	4,547.12	0.00	0.4%	91.5%
2.B.1 Ammonia Production	CO ₂	1,255.82	1,875.12	0.00	0.4%	91.9%
1.A.1. Energy industries-Biomass	N ₂ O	0.63	22.95	0.00	0.4%	92.3%
2.A.1 Cement Production	CO ₂	1,668.07	400.83	0.00	0.4%	92.7%
1.A.4 Other sectors-Solid fuels	CH ₄	128.56	14.27	0.00	0.4%	93.1%
4.C.2 Land converted to grassland- net carbon stock change in organic soils	CO ₂	45.06	63.87	0.00	0.4%	93.4%
4.B.1 Cropland remaining cropland - carbon stock change in biomass	CO ₂	77.39	-13.37	0.00	0.4%	93.8%
1.A.4 Other sectors-Biomass	N ₂ O	12.97	27.63	0.00	0.3%	94.1%
2.A.2 Lime Production	CO ₂	222.68	41.22	0.00	0.3%	94.5%
4.C.1 Grassland remaining grassland	CO ₂	80.81	81.96	0.00	0.3%	94.8%
1.A.4 Other sectors-Liquid fuels	CO ₂	1,429.58	182.35	0.00	0.3%	95.1%
1.A.2 Manufacturing industries and construction-Solid fuels	CO ₂	171.63	473.11	0.00	0.3%	95.4%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment with uncertainty</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
4.A Forest land	N ₂ O	33.55	36.09	0.00	0.3%	95.7%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CO ₂	2,048.76	543.13	0.00	0.3%	96.0%
2.G Other product manufacture and use	N ₂ O	96.05	5.19	0.00	0.3%	96.2%
2.B.2 Nitric Acid Production	N ₂ O	893.01	331.76	0.00	0.3%	96.5%
1.A.1. Energy industries-Biomass	CH ₄	0.40	14.44	0.00	0.2%	96.7%
3.B.1.3 Manure Management - Swine	CH ₄	236.72	71.18	0.00	0.2%	97.0%
5.B Biological Treatment of Solid Waste	CH ₄	4.04	20.44	0.00	0.2%	97.2%
4.C Grassland	N ₂ O	2.49	26.30	0.00	0.2%	97.4%
4.B.2 Land converted to cropland- net carbon stock change in organic soils	CO ₂	133.17	102.05	0.00	0.2%	97.6%
4.B Cropland	N ₂ O	420.20	322.03	0.00	0.2%	97.8%
1.A.4 Other sectors-Gaseous fuels	CO ₂	1,381.52	461.17	0.00	0.2%	98.0%
5.B Biological Treatment of Solid Waste	N ₂ O	2.89	14.62	0.00	0.2%	98.1%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	206.45	118.49	0.00	0.1%	98.2%
1.A.3.b Road transportation	CH ₄	48.11	14.81	0.00	0.1%	98.4%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,503.71	1,305.06	0.00	0.1%	98.5%
4.D.2 Land converted to wetlands	CO ₂	0.00	12.30	0.00	0.1%	98.6%
2.A.4 Other process use of carbonates	CO ₂	239.52	17.46	0.00	0.1%	98.7%
1.A.1. Energy industries-Solid fuels	CO ₂	174.05	6.74	0.00	0.1%	98.8%
1.A.4 Other sectors-Peat	CO ₂	27.13	109.04	0.00	0.1%	98.9%
2. D Non-energy products from fuels and solvent use	CO ₂	65.87	62.62	0.00	0.1%	99.0%
3.G Liming	CO ₂	20.59	24.71	0.00	0.1%	99.0%
2.F.2 Foam Blowing Agents	HFCs	0.00	14.14	0.00	0.1%	99.1%
1.A.1. Energy industries-Other fossil fuels	CO ₂	0.00	82.56	0.00	0.1%	99.2%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	0.60	4.08	0.00	0.1%	99.2%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment with uncertainty</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.3.b Road transportation	N ₂ O	39.09	35.36	0.00	0.1%	99.3%
3.B.1 Manure Management - Other	CH ₄	75.24	27.10	0.00	0.1%	99.3%
3.B.1.1 Manure Management - Cattle	CH ₄	247.40	137.58	0.00	0.0%	99.4%
1.A.1. Energy industries-Liquid fuels	N ₂ O	16.11	1.83	0.00	0.0%	99.4%
1.A.3.c Railways	N ₂ O	40.92	20.36	0.00	0.0%	99.5%
3.H Urea Application	CO ₂	35.68	15.72	0.00	0.0%	99.5%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	0.38	2.56	0.00	0.0%	99.6%
1.A.4 Other sectors-Solid fuels	N ₂ O	13.00	1.44	0.00	0.0%	99.6%
1.A.3.c Railways	CO ₂	349.97	174.13	0.00	0.0%	99.6%
4.D Wetlands	N ₂ O	11.92	4.77	0.00	0.0%	99.7%
1.B.2 Oil, natural gas and other emissions from energy production	CO ₂	0.63	4.01	0.00	0.0%	99.7%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	8.06	0.14	0.00	0.0%	99.7%
1.A.4 Other sectors-Peat	CH ₄	1.12	4.91	0.00	0.0%	99.8%
5.D Wastewater Treatment and Discharge	N ₂ O	67.21	45.27	0.00	0.0%	99.8%
1.A.1. Energy industries-Liquid fuels	CH ₄	6.90	0.93	0.00	0.0%	99.8%
3.A. Enteric Fermentation - Others	CH ₄	118.06	66.74	0.00	0.0%	99.8%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	0.26	1.79	0.00	0.0%	99.8%
2.C.1 Iron and Steel Production	CO ₂	16.98	2.60	0.00	0.0%	99.8%
1.A.4 Other sectors-Liquid fuels	CH ₄	4.17	0.46	0.00	0.0%	99.9%
1.A.2 Manufacturing industries and construction-Liquid fuels	CH ₄	3.38	0.06	0.00	0.0%	99.9%
4.A.1 Forest land remaining forest land	CO ₂	4.28	5.37	0.00	0.0%	99.9%
1.A.3.e Other transportation	CH ₄	4.30	0.38	0.00	0.0%	99.9%
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	0.81	2.20	0.00	0.0%	99.9%
1.A.1. Energy industries-Peat	CO ₂	11.06	17.63	0.00	0.0%	99.9%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment with uncertainty</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.4 Other sectors-Liquid fuels	N ₂ O	2.67	0.23	0.00	0.0%	99.9%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	10.94	8.19	0.00	0.0%	99.9%
2.F.3 Fire Protection	HFCs	0.00	2.15	0.00	0.0%	99.9%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	3.13	0.83	0.00	0.0%	99.9%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	0.45	1.23	0.00	0.0%	99.9%
1.A.1. Energy industries-Gaseous fuels	CH ₄	2.63	0.70	0.00	0.0%	99.9%
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.00	0.90	0.00	0.0%	99.9%
1.A.4 Other sectors-Gaseous fuels	CH ₄	3.13	1.04	0.00	0.0%	100.0%
4.C Grassland	CH ₄	2.12	1.95	0.00	0.0%	100.0%
2.F.4 Aerosols/metered dose inhalers	HFCs	0.85	6.20	0.00	0.0%	100.0%
4.A Forest land	CH ₄	0.71	0.95	0.00	0.0%	100.0%
2. E Electronic Industry	SF ₆ , NF ₃	0.00	5.05	0.00	0.0%	100.0%
1.A.3.a Domestic aviation	CO ₂	8.16	1.94	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Peat	CO ₂	17.53	6.78	0.00	0.0%	100.0%
1.A.3.d Domestic Navigation	CO ₂	15.49	14.51	0.00	0.0%	100.0%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.00	0.57	0.00	0.0%	100.0%
1.A.1. Energy industries-Solid fuels	N ₂ O	0.82	0.03	0.00	0.0%	100.0%
5.C Incineration and Open Burning of Waste	CO ₂	2.66	1.96	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	1.11	0.29	0.00	0.0%	100.0%
1.A.4 Other sectors-Peat	N ₂ O	0.11	0.44	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.93	0.25	0.00	0.0%	100.0%
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.37	0.00	0.0%	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.75	0.25	0.00	0.0%	100.0%
2.G Other product manufacture and use	SF ₆	0.05	1.22	0.00	0.0%	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment with uncertainty</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.3.c Railways	CH ₄	0.50	0.25	0.00	0.0%	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.13	0.12	0.00	0.0%	100.0%
1.A.3.a Domestic aviation	N ₂ O	0.07	0.02	0.00	0.0%	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.05	0.08	0.00	0.0%	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.05	0.00	0.00	0.0%	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.00	0.02	0.00	0.0%	100.0%
2.A.3 Glass Production	CO ₂	11.70	7.41	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.08	0.03	0.00	0.0%	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.08	0.06	0.00	0.0%	100.0%
1.A.3.d Domestic Navigation	CH ₄	0.04	0.03	0.00	0.0%	100.0%
4.B Cropland	CH ₄	0.05	0.05	0.00	0.0%	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.01	0.00	0.00	0.0%	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	0.00	0.0%	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	0.00	0.0%	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CH ₄	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	0.00	0.0%	100.0%
2.B.8.a Methanol	CO ₂	24.35	0.00	0.00	0.0%	100.0%
2.B.8.a Methanol	CH ₄	5.24	0.00	0.00	0.0%	100.0%
4.E.1 Settlements remaining settlements	CO ₂	0.00	0.00	0.00	0.0%	100.0%
Total		43,540.93	10,847.53	0.36	1.00	

Approach 2 Trend Assessment for 2014 using a subset (LULUCF was excluded from analysis)

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment with uncertainty</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
5.A Solid Waste Disposal	CH ₄	1,028.83	834.33	0.07	21.3%	21.3%
3.D.1.1 Direct N ₂ O Emissions From Managed Soils - Inorganic N Fertilizers	N ₂ O	992.77	721.16	0.04	11.0%	32.3%
3.D.1.4 Direct N ₂ O Emissions From Managed Soils - Crop Residues	N ₂ O	139.12	353.56	0.03	10.2%	42.5%
1.A.4 Other sectors-Biomass	CH ₄	70.28	150.36	0.03	7.7%	50.2%
3.D.2.2 Indirect N ₂ O Emissions From Managed Soils - Nitrogen leaching and run-off	N ₂ O	375.24	293.99	0.02	7.2%	57.5%
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	260.55	276.55	0.01	3.5%	60.9%
1.A.1.a Public electricity and heat production - Liquid Fuels	CO ₂	6,021.25	151.42	0.01	2.9%	63.8%
1.A.3.b Road transportation	CO ₂	5,247.15	4,547.12	0.01	2.8%	66.6%
1.A.4 Other sectors-Solid fuels	CO ₂	2,760.55	305.30	0.01	2.5%	69.1%
3.D.2.1 Indirect N ₂ O Emissions From Managed Soils - Atmospheric deposition	N ₂ O	206.45	118.49	0.01	1.8%	70.8%
2.B.1 Ammonia Production	CO ₂	1,255.82	1,875.12	0.01	1.8%	72.6%
1.A.2 Manufacturing industries and construction-Liquid fuels	CO ₂	3,500.92	75.49	0.01	1.7%	74.3%
2.F.1 Refrigeration and Air Conditioning Equipment	HFCs	2.19	289.94	0.01	1.7%	76.0%
1.A.3.e Other transportation	CO ₂	1,764.11	236.35	0.01	1.6%	77.6%
1.A.4 Other sectors-Biomass	N ₂ O	12.97	27.63	0.00	1.4%	79.0%
1.A.1. Energy industries-Biomass	N ₂ O	0.63	22.95	0.00	1.4%	80.4%
3.B.1 Manure Management - Other	N ₂ O	109.48	12.34	0.00	1.2%	81.6%
1.A.2 Manufacturing industries and construction-Solid fuels	CO ₂	171.63	473.11	0.00	1.2%	82.8%
1.A.3.e Other transportation	N ₂ O	186.55	19.15	0.00	1.1%	83.9%
3.B.2 Manure Management - Indirect N ₂ O Emissions	N ₂ O	227.47	80.96	0.00	1.0%	85.0%

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1.A.1.a Public electricity and heat production - Gaseous Fuels	CO ₂	5,806.05	1,532.96	0.00	1.0%	86.0%
1.A.1.b Petroleum refining - Liquid Fuels	CO ₂	1,503.71	1,305.06	0.00	0.9%	86.9%
1.A.1. Energy industries-Biomass	CH ₄	0.40	14.44	0.00	0.9%	87.8%
5.B Biological Treatment of Solid Waste	CH ₄	4.04	20.44	0.00	0.8%	88.6%
3.D.1.3 Direct N ₂ O Emissions From Managed Soils - Urine and dung deposited by grazing animals	N ₂ O	414.53	190.08	0.00	0.8%	89.4%
1.A.4 Other sectors-Solid fuels	CH ₄	128.56	14.27	0.00	0.8%	90.1%
3.A.1 Enteric Fermentation - Cattle	CH ₄	4,101.48	1,570.66	0.00	0.7%	90.8%
1.A.4 Other sectors-Liquid fuels	CO ₂	1,429.58	182.35	0.00	0.6%	91.4%
2.A.2 Lime Production	CO ₂	222.68	41.22	0.00	0.6%	92.0%
2.A.1 Cement Production	CO ₂	1,668.07	400.83	0.00	0.6%	92.6%
5.B Biological Treatment of Solid Waste	N ₂ O	2.89	14.62	0.00	0.6%	93.2%
2.G Other product manufacture and use	N ₂ O	96.05	5.19	0.00	0.6%	93.7%
5.D Wastewater Treatment and Discharge	N ₂ O	67.21	45.27	0.00	0.4%	94.1%
2. D Non-energy products from fuels and solvent use	CO ₂	65.87	62.62	0.00	0.4%	94.6%
3.B.1.1 Manure Management - Cattle	CH ₄	247.40	137.58	0.00	0.4%	95.0%
1.A.3.b Road transportation	N ₂ O	39.09	35.36	0.00	0.4%	95.4%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CO ₂	2,048.76	543.13	0.00	0.4%	95.7%
3.G Liming	CO ₂	20.59	24.71	0.00	0.3%	96.1%
1.A.4 Other sectors-Peat	CO ₂	27.13	109.04	0.00	0.3%	96.4%
3.B.1.3 Manure Management - Swine	CH ₄	236.72	71.18	0.00	0.3%	96.6%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment with uncertainty</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
2.F.2 Foam Blowing Agents	HFCs	0.00	14.14	0.00	0.2%	96.9%
1.A.2 Manufacturing industries and construction-Biomass	N ₂ O	0.60	4.08	0.00	0.2%	97.1%
1.A.1. Energy industries-Other fossil fuels	CO ₂	0.00	82.56	0.00	0.2%	97.4%
3.B.2 Manure Management - Cattle	N ₂ O	201.63	75.65	0.00	0.2%	97.6%
2.A.4 Other process use of carbonates	CO ₂	239.52	17.46	0.00	0.2%	97.7%
1.A.1. Energy industries-Solid fuels	CO ₂	174.05	6.74	0.00	0.2%	97.9%
3.A. Enteric Fermentation - Others	CH ₄	118.06	66.74	0.00	0.2%	98.1%
1.A.4 Other sectors-Gaseous fuels	CO ₂	1,381.52	461.17	0.00	0.1%	98.2%
1.A.2 Manufacturing industries and construction-Biomass	CH ₄	0.38	2.56	0.00	0.1%	98.4%
1.A.3.b Road transportation	CH ₄	48.11	14.81	0.00	0.1%	98.5%
1.A.3.c Railways	N ₂ O	40.92	20.36	0.00	0.1%	98.6%
2.B.2 Nitric Acid Production	N ₂ O	893.01	331.76	0.00	0.1%	98.8%
1.B.2 Oil, natural gas and other emissions from energy production	CO ₂	0.63	4.01	0.00	0.1%	98.9%
1.A.3.c Railways	CO ₂	349.97	174.13	0.00	0.1%	99.0%
1.A.1. Energy industries-Liquid fuels	N ₂ O	16.11	1.83	0.00	0.1%	99.1%
1.A.4 Other sectors-Peat	CH ₄	1.12	4.91	0.00	0.1%	99.2%
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	10.94	8.19	0.00	0.1%	99.2%
1.A.4 Other sectors-Solid fuels	N ₂ O	13.00	1.44	0.00	0.1%	99.3%
5.D Wastewater Treatment and Discharge	CH ₄	541.86	219.90	0.00	0.1%	99.4%
1.A.2 Manufacturing industries and construction-Liquid fuels	N ₂ O	8.06	0.14	0.00	0.1%	99.4%
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	0.26	1.79	0.00	0.1%	99.5%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment with uncertainty</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.1. Energy industries-Peat	CO ₂	11.06	17.63	0.00	0.0%	99.5%
1.A.2 Manufacturing industries and construction-Solid fuels	N ₂ O	0.81	2.20	0.00	0.0%	99.6%
1.A.1. Energy industries-Liquid fuels	CH ₄	6.90	0.93	0.00	0.0%	99.6%
3.B.1 Manure Management - Other	CH ₄	75.24	27.10	0.00	0.0%	99.6%
3.H Urea Application	CO ₂	35.68	15.72	0.00	0.0%	99.7%
1.A.2 Manufacturing industries and construction-Liquid fuels	CH ₄	3.38	0.06	0.00	0.0%	99.7%
5.C Incineration and Open Burning of Waste	CO ₂	2.66	1.96	0.00	0.0%	99.7%
1.A.4 Other sectors-Liquid fuels	CH ₄	4.17	0.46	0.00	0.0%	99.7%
2.F.3 Fire Protection	HFCs	0.00	2.15	0.00	0.0%	99.8%
2.C.1 Iron and Steel Production	CO ₂	16.98	2.60	0.00	0.0%	99.8%
1.A.2 Manufacturing industries and construction-Solid fuels	CH ₄	0.45	1.23	0.00	0.0%	99.8%
1.A.3.e Other transportation	CH ₄	4.30	0.38	0.00	0.0%	99.8%
1.A.3.d Domestic Navigation	CO ₂	15.49	14.51	0.00	0.0%	99.8%
1.A.1. Energy industries-Other fossil fuels	N ₂ O	0.00	0.90	0.00	0.0%	99.9%
1.A.4 Other sectors-Liquid fuels	N ₂ O	2.67	0.23	0.00	0.0%	99.9%
2.F.4 Aerosols/metered dose inhalers	HFCs	0.85	6.20	0.00	0.0%	99.9%
2. E Electronic Industry	SF ₆ , NF ₃	0.00	5.05	0.00	0.0%	99.9%
1.A.1. Energy industries-Other fossil fuels	CH ₄	0.00	0.57	0.00	0.0%	99.9%
2.A.3 Glass Production	CO ₂	11.70	7.41	0.00	0.0%	99.9%
1.A.1. Energy industries-Gaseous fuels	N ₂ O	3.13	0.83	0.00	0.0%	99.9%
1.A.4 Other sectors-Peat	N ₂ O	0.11	0.44	0.00	0.0%	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment with uncertainty</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
3.D.1.6 Direct N ₂ O Emissions From Managed Soils - Cultivation of organic soils	N ₂ O	0.37	0.37	0.00	0.0%	100.0%
1.A.1. Energy industries-Gaseous fuels	CH ₄	2.63	0.70	0.00	0.0%	100.0%
1.A.1. Energy industries-Solid fuels	N ₂ O	0.82	0.03	0.00	0.0%	100.0%
1.A.3.a Domestic aviation	CO ₂	8.16	1.94	0.00	0.0%	100.0%
1.A.4 Other sectors-Gaseous fuels	CH ₄	3.13	1.04	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	N ₂ O	1.11	0.29	0.00	0.0%	100.0%
2.G Other product manufacture and use	SF ₆	0.05	1.22	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Gaseous fuels	CH ₄	0.93	0.25	0.00	0.0%	100.0%
1.A.3.d Domestic Navigation	N ₂ O	0.13	0.12	0.00	0.0%	100.0%
1.A.3.c Railways	CH ₄	0.50	0.25	0.00	0.0%	100.0%
1.A.1. Energy industries-Peat	N ₂ O	0.05	0.08	0.00	0.0%	100.0%
1.A.4 Other sectors-Gaseous fuels	N ₂ O	0.75	0.25	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Peat	CO ₂	17.53	6.78	0.00	0.0%	100.0%
5.C Incineration and Open Burning of Waste	N ₂ O	0.08	0.06	0.00	0.0%	100.0%
1.B.2 Oil, natural gas and other emissions from energy production	N ₂ O	0.00	0.02	0.00	0.0%	100.0%
1.A.3.a Domestic aviation	N ₂ O	0.07	0.02	0.00	0.0%	100.0%
1.A.3.d Domestic Navigation	CH ₄	0.04	0.03	0.00	0.0%	100.0%
1.A.1. Energy industries-Solid fuels	CH ₄	0.05	0.00	0.00	0.0%	100.0%
3.D.1.2 Direct N ₂ O Emissions From Managed Soils - Organic N Fertilizers	N ₂ O	317.91	127.96	0.00	0.0%	100.0%
1.A.1. Energy industries-Peat	CH ₄	0.00	0.00	0.00	0.0%	100.0%
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	0.00	0.0%	100.0%

<i>IPCC Category</i>	<i>Greenhouse gas</i>	<i>1990 kt CO₂ eqv.</i>	<i>2014 kt CO₂ eqv.</i>	<i>Trend assessment with uncertainty</i>	<i>% Contribution to Trend</i>	<i>Cumulative total</i>
1.A.2 Manufacturing industries and construction-Peat	N ₂ O	0.08	0.03	0.00	0.0%	100.0%
1.A.3.a Domestic aviation	CH ₄	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Peat	CH ₄	0.01	0.00	0.00	0.0%	100.0%
1.A.1. Energy industries-Biomass	CO ₂	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CO ₂	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	CH ₄	0.00	0.00	0.00	0.0%	100.0%
1.A.2 Manufacturing industries and construction-Other fossil fuels	N ₂ O	0.00	0.00	0.00	0.0%	100.0%
2.B.8.a Methanol	CO ₂	24.35	0.00	0.00	0.0%	100.0%
2.B.8.a Methanol	CH ₄	5.24	0.00	0.00	0.0%	100.0%
Total		47,084.1	18,950.7	0.33	1.00	

ANNEX II. Tier 1 Uncertainty assessment

Table 1a. Uncertainty evaluation including LULUCF

IPCC Source category	Gas	Base year (1990) emissions*	Emissions in 2014	Activity data uncertainty	Emission factor uncertainty	Combined uncertainty	Combined uncertainty as % of total national emissions in 2012	Type A sensitivity	Type B sensitivity	Uncertainty in trend in national emissions introduced by emission factor uncertainty	Uncertainty in trend in national emissions introduced by activity data uncertainty	Uncertainty introduced into the trend in total national emissions
		kt CO ₂ eqv.	kt CO ₂ eqv.	%	%	%	%	%	%	%	%	%
1.A.1 Fuel combustion - Energy Industries - Liquid Fuels	CO ₂	7,534.30	1,470.68	2%	3%	3%	0.000	0.009	0.034	0.000	0.001	0.000
1.A.1 Fuel combustion - Energy Industries - Liquid Fuels	CH ₄	6.90	0.93	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Liquid Fuels	N ₂ O	16.11	1.83	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Solid Fuels	CO ₂	174.05	6.74	2%	7%	7%	0.000	0.001	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Solid Fuels	CH ₄	0.05	0.00	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Solid Fuels	N ₂ O	0.82	0.03	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Gaseous Fuels	CO ₂	5,806.05	1,536.17	2%	3%	3%	0.000	0.002	0.035	0.000	0.001	0.000
1.A.1 Fuel combustion - Energy Industries - Gaseous Fuels	CH ₄	2.63	0.70	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Gaseous Fuels	N ₂ O	3.13	0.83	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Other Fossil Fuels	CO ₂	0.00	82.56	2%	7%	7%	0.000	0.002	0.002	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Other Fossil Fuels	CH ₄	0.00	0.57	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Other Fossil Fuels	N ₂ O	0.00	0.90	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Peat	CO ₂	11.06	17.63	2%	7%	7%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Peat	CH ₄	0.00	0.00	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000

1.A.1 Fuel combustion - Energy Industries - Peat	N ₂ O	0.05	0.08	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Biomass	CO ₂			30%	50%	58%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Biomass	CH ₄	0.40	14.44	30%	150%	153%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Biomass	N ₂ O	0.63	22.95	30%	150%	153%	0.000	0.001	0.001	0.001	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Liquid Fuels	CO ₂	3,500.92	75.49	2%	3%	3%	0.000	0.018	0.002	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Liquid Fuels	CH ₄	3.38	0.06	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Liquid Fuels	N ₂ O	8.06	0.14	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Solid Fuels	CO ₂	171.63	473.11	2%	7%	7%	0.000	0.010	0.011	0.001	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Solid Fuels	CH ₄	0.45	1.23	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Solid Fuels	N ₂ O	0.81	2.20	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Gaseous Fuels	CO ₂	2,048.76	543.13	2%	3%	3%	0.000	0.001	0.012	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Gaseous Fuels	CH ₄	0.93	0.25	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Gaseous Fuels	N ₂ O	1.11	0.29	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Peat	CO ₂	17.53	6.78	2%	7%	7%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Peat	CH ₄	0.01	0.00	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Peat	N ₂ O	0.08	0.03	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Biomass	CO ₂			30%	50%	58%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Biomass	CH ₄	0.38	2.56	30%	150%	153%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Biomass	N ₂ O	0.60	4.08	30%	150%	153%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.a Domestic Aviation	CO ₂	8.16	1.94	10%	2%	10%	0.000	0.000	0.000	0.000	0.000	0.000

1.A.3.a Domestic Aviation	CH ₄	0.00	0.00	10%	79%	79%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.a Domestic Aviation	N ₂ O	0.07	0.02	10%	110%	110%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.b Road Transportation	CO ₂	5,247.15	4,547.12	2%	2%	3%	0.000	0.074	0.104	0.001	0.003	0.000
1.A.3.b Road Transportation	CH ₄	48.11	14.81	2%	40%	40%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.b Road Transportation	N ₂ O	39.09	35.36	2%	50%	50%	0.000	0.001	0.001	0.000	0.000	0.000
1.A.3.c Railways	CO ₂	349.97	174.13	5%	5%	7%	0.000	0.002	0.004	0.000	0.000	0.000
1.A.3.c Railways	CH ₄	0.50	0.25	5%	75%	75%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.c Railways	N ₂ O	40.92	20.36	5%	75%	75%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.d Domestic Navigation - Liquid Fuels	CO ₂	15.49	14.51	5%	3%	6%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.d Domestic Navigation - Liquid Fuels	CH ₄	0.04	0.03	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.d Domestic Navigation - Liquid Fuels	N ₂ O	0.13	0.12	5%	90%	90%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.e.i Other Transportation - Pipeline Transportation	CO ₂	85.50	68.04	5%	7%	9%	0.000	0.001	0.002	0.000	0.000	0.000
1.A.3.e.i Other Transportation - Pipeline Transportation	CH ₄	0.04	0.03	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.e.i Other Transportation - Pipeline Transportation	N ₂ O	0.05	0.04	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.e.ii Other Transportation - Off-road transport	CO ₂	1,678.61	168.31	10%	5%	11%	0.000	0.006	0.004	0.000	0.001	0.000
1.A.3.e.ii Other Transportation - Off-road transport	CH ₄	4.26	0.35	10%	40%	41%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.e.ii Other Transportation - Off-road transport	N ₂ O	186.51	19.12	10%	50%	51%	0.000	0.001	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Liquid Fuels	CO ₂	1,429.58	182.35	3%	3%	4%	0.000	0.004	0.004	0.000	0.000	0.000
1.A.4 Other Sectors - Liquid Fuels	CH ₄	4.17	0.46	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Liquid Fuels	N ₂ O	2.67	0.23	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Solid Fuels	CO ₂	2,760.55	305.30	3%	7%	8%	0.000	0.009	0.007	0.001	0.000	0.000
1.A.4 Other Sectors - Solid Fuels	CH ₄	128.56	14.27	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Solid Fuels	N ₂ O	13.00	1.44	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Gaseous Fuels	CO ₂	1,381.52	461.17	3%	3%	4%	0.000	0.003	0.011	0.000	0.000	0.000
1.A.4 Other Sectors - Gaseous Fuels	CH ₄	3.13	1.04	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Gaseous Fuels	N ₂ O	0.75	0.25	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Peat	CO ₂	27.13	109.04	3%	7%	8%	0.000	0.002	0.003	0.000	0.000	0.000
1.A.4 Other Sectors - Peat	CH ₄	1.12	4.91	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Peat	N ₂ O	0.11	0.44	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors- Biomass	CO ₂			50%	50%	71%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors- Biomass	CH ₄	70.28	150.36	50%	150%	158%	0.000	0.003	0.003	0.005	0.002	0.000

1.A.4 Other Sectors- Biomass	N ₂ O	12.97	27.63	50%	150%	158%	0.000	0.001	0.001	0.001	0.000	0.000
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CO ₂	0.05	0.04	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CH ₄	10.94	8.19	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	N ₂ O	0.00	0.00	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CO ₂	0.01	0.01	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	260.55	276.55	5%	50%	50%	0.000	0.005	0.006	0.002	0.000	0.000
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CO ₂	0.58	3.96	5%	75%	75%	0.000	0.000	0.000	0.000	0.000	0.000
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	0.26	1.79	5%	75%	75%	0.000	0.000	0.000	0.000	0.000	0.000
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	N ₂ O	0.00	0.02	5%	75%	75%	0.000	0.000	0.000	0.000	0.000	0.000
2.A.1 Cement Production	CO ₂	1,668.07	400.83	2%	5%	5%	0.000	0.000	0.009	0.000	0.000	0.000
2.A.2 Lime Production	CO ₂	222.68	41.22	5%	30%	31%	0.000	0.000	0.001	0.000	0.000	0.000
2.A.3 Glass Production	CO ₂	11.70	7.41	7%	5%	9%	0.000	0.000	0.000	0.000	0.000	0.000
2.A.4.a Ceramics	CO ₂	227.92	5.23	5%	5%	7%	0.000	0.001	0.000	0.000	0.000	0.000
2.A.4.b Other use of soda ash	CO ₂	5.32	0.96	15%	5%	16%	0.000	0.000	0.000	0.000	0.000	0.000
2.A.4.d Mineral wool production	CO ₂	6.28	11.27	7%	5%	9%	0.000	0.000	0.000	0.000	0.000	0.000
2.B.1 Ammonia Production	CO ₂	1,255.82	1,875.12	2%	3%	3%	0.000	0.036	0.043	0.001	0.001	0.000
2.B.2 Nitric Acid Production	N ₂ O	893.01	331.76	2%	10%	10%	0.000	0.002	0.008	0.000	0.000	0.000
2.B.8.a Methanol	CO ₂	24.35	0.00	5%	30%	30%	0.000	0.000	0.000	0.000	0.000	0.000
2.B.8.a Methanol	CH ₄	5.24	0.00	5%	30%	30%	0.000	0.000	0.000	0.000	0.000	0.000
2.C.1 Iron and Steel Production	CO ₂	16.98	2.60	10%	10%	14%	0.000	0.000	0.000	0.000	0.000	0.000
2.D.1 Lubricant use	CO ₂	6.06	11.84	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
2.D.2 Parafin wax use	CO ₂	0.00	2.17	5%	100%	100%	0.000	0.000	0.000	0.000	0.000	0.000
2.D.3 Solvent use	CO ₂	59.79	47.42	30%	20%	36%	0.000	0.001	0.001	0.000	0.000	0.000
2.D.3 Asphalt roofing	CO ₂	0.02	0.01	5%	25%	25%	0.000	0.000	0.000	0.000	0.000	0.000
2.D.3 Road paving with asphalt	CO ₂	0.00	0.00	20%	50%	54%	0.000	0.000	0.000	0.000	0.000	0.000
2.D.3 Urea-based catalyst	CO ₂	0.00	1.18	10%	2%	10%	0.000	0.000	0.000	0.000	0.000	0.000
2.E.1 Semiconductor	SF ₆	0.00	4.75	5%	5%	7%	0.000	0.000	0.000	0.000	0.000	0.000
2.E.3 Photovoltaics	NF ₃	0.00	0.29	5%	5%	7%	0.000	0.000	0.000	0.000	0.000	0.000
2.F.1.a Domestic Refrigeration	HFCs	0.24	1.48	14%	28%	32%	0.000	0.000	0.000	0.000	0.000	0.000

2.F.1.a Commercial Refrigeration	HFCs	1.15	59.75	36%	21%	42%	0.000	0.001	0.001	0.000	0.001	0.000
2.F.1.a Transport Refrigeration	HFCs	0.14	84.19	11%	21%	23%	0.000	0.002	0.002	0.000	0.000	0.000
2.F.1.a Industrial Refrigeration	HFCs	0.29	15.00	30%	15%	34%	0.000	0.000	0.000	0.000	0.000	0.000
2.F.1.a Stationary Air-Conditioning	HFCs	0.15	15.09	36%	28%	46%	0.000	0.000	0.000	0.000	0.000	0.000
2.F.1.b Mobile Air-Conditioning	HFCs	0.22	114.42	11%	21%	23%	0.000	0.003	0.003	0.001	0.000	0.000
2.F.2 Foam Blowing Agents	HFCs	0.00	14.14	30%	30%	42%	0.000	0.000	0.000	0.000	0.000	0.000
2.F.3 Fire Protection	HFCs	0.00	2.15	20%	20%	28%	0.000	0.000	0.000	0.000	0.000	0.000
2.F.4 Aerosols/metered dose inhalers	HFCs	0.85	6.20	5%	5%	7%	0.000	0.000	0.000	0.000	0.000	0.000
2.G.1 Manufacture of electrical equipments	SF ₆	0.05	1.06	5%	5%	7%	0.000	0.000	0.000	0.000	0.000	0.000
2.G.2.b Accelerators	SF ₆	0.00	0.16	5%	5%	7%	0.000	0.000	0.000	0.000	0.000	0.000
2.G.3.a Medical applications	N ₂ O	93.35	3.05	5%	5%	7%	0.000	0.000	0.000	0.000	0.000	0.000
2.G.3.b Propellant for pressure and aerosol products	N ₂ O	2.70	2.14	20%	100%	102%	0.000	0.000	0.000	0.000	0.000	0.000
3.A Enteric Fermentation	CH ₄	4,219.54	1,637.40	5%	20%	21%	0.001	0.013	0.038	0.003	0.003	0.000
3.B Manure Management	CH ₄	559.35	235.86	19%	20%	27%	0.000	0.002	0.005	0.000	0.001	0.000
3.B Manure Management	N ₂ O	538.57	168.95	39%	123%	129%	0.000	0.001	0.004	0.001	0.002	0.000
3.D.1 Direct N ₂ O Emissions From Managed Soils	N ₂ O	1,864.72	1,393.13	8%	85%	86%	0.012	0.021	0.032	0.018	0.004	0.000
3.D.2 Indirect N ₂ O Emissions From Managed Soils	N ₂ O	581.69	412.48	14%	125%	126%	0.002	0.006	0.009	0.008	0.002	0.000
3.G Liming	CO ₂	20.59	24.71	10%	50%	51%	0.000	0.000	0.001	0.000	0.000	0.000
3.H Urea Application	CO ₂	35.68	15.72	30%	50%	58%	0.000	0.000	0.000	0.000	0.000	0.000
4.A.1 Forest Land Remaining Forest Land	CO ₂	-7,149.77	-,9042.56	4%	36%	36%	0.088	0.167	0.208	0.059	0.010	0.004
4.A.1 Forest Land Remaining Forest Land	CH ₄	0.68	0.90	35%	70%	78%	0.000	0.000	0.000	0.000	0.000	0.000
4.A.1 Forest Land Remaining Forest Land	N ₂ O	0.45	0.60	11%	172%	172%	0.000	0.000	0.000	0.000	0.000	0.000
4.A.2 Land Converted to Forest Land	CO ₂	-1,033.89	-,1195.08	17%	35%	39%	0.002	0.022	0.027	0.008	0.007	0.000
4.A.2 Land Converted to Forest Land	CH ₄	0.04	0.05	35%	70%	78%	0.000	0.000	0.000	0.000	0.000	0.000
4.A.2 Land Converted to Forest Land	N ₂ O	0.02	0.03	11%	172%	172%	0.000	0.000	0.000	0.000	0.000	0.000
4(II) Emissions and removals from drainage and rewetting and other management of organic and mineral soils	CO ₂	406.04	432.78	11%	90%	91%	0.001	0.008	0.010	0.007	0.002	0.000
4(II) Emissions and removals from drainage and rewetting and other management of organic and mineral soils	N ₂ O	33.08	35.46	11%	173%	173%	0.000	0.001	0.001	0.001	0.000	0.000
4.B Cropland	CO ₂	5,298.23	4,083.97	2%	90%	90%	0.114	0.063	0.094	0.057	0.003	0.003

4.B Cropland	CH ₄	0.05	0.05	20%	20%	28%	0.000	0.000	0.000	0.000	0.000	0.000
4.B Cropland	N ₂ O	420.20	322.03	20%	20%	28%	0.000	0.005	0.007	0.001	0.002	0.000
4.C Grassland	CO ₂	-1,956.23	-2,688.53	1%	90%	90%	0.049	0.051	0.062	0.045	0.001	0.002
4.C Grassland	CH ₄	2.12	1.95	50%	50%	71%	0.000	0.000	0.000	0.000	0.000	0.000
4.C Grassland	N ₂ O	2.49	26.30	50%	50%	71%	0.000	0.001	0.001	0.000	0.000	0.000
4.D Wetlands	CO ₂	517.33	887.50	80%	20%	82%	0.005	0.017	0.020	0.003	0.023	0.001
4.D Wetlands	N ₂ O	11.92	4.77	50%	100%	112%	0.000	0.000	0.000	0.000	0.000	0.000
4.E Settlements	CO ₂	0.00	372.65	80%	20%	82%	0.001	0.009	0.009	0.002	0.010	0.000
4.E Settlements	N ₂ O	0.00	29.45	50%	50%	71%	0.000	0.001	0.001	0.000	0.000	0.000
4.F Other Land	CO ₂	0.00	50.11	50%	75%	90%	0.000	0.001	0.001	0.001	0.001	0.000
4.F Other Land	N ₂ O	0.00	4.12	50%	50%	71%	0.000	0.000	0.000	0.000	0.000	0.000
4.G Harvested Wood Products	CO ₂	-95.65	-1399.35	15%	59%	61%	0.006	0.032	0.032	0.019	0.007	0.000
5.A Solid Waste Disposal	CH ₄	1,028.83	834.33	30%	123%	126%	0.009	0.013	0.019	0.016	0.008	0.000
5.B Biological Treatment of Solid Waste	CH ₄	4.04	20.44	40%	100%	108%	0.000	0.000	0.000	0.000	0.000	0.000
5.B Biological Treatment of Solid Waste	N ₂ O	2.89	14.62	40%	100%	108%	0.000	0.000	0.000	0.000	0.000	0.000
5.C Incineration and Open Burning of Waste	CO ₂	2.66	1.96	40%	60%	72%	0.000	0.000	0.000	0.000	0.000	0.000
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	40%	60%	72%	0.000	0.000	0.000	0.000	0.000	0.000
5.C Incineration and Open Burning of Waste	N ₂ O	0.08	0.06	40%	60%	72%	0.000	0.000	0.000	0.000	0.000	0.000
5.D Wastewater Treatment and Discharge	CH ₄	541.86	219.90	59%	73%	93%	0.000	0.002	0.005	0.001	0.004	0.000
5.D Wastewater Treatment and Discharge	N ₂ O	67.21	45.27	30%	50%	58%	0.000	0.001	0.001	0.000	0.000	0.000
Total emission		43,550.50	10,895.31	Overall uncertainty (%)			54.0	Trend uncertainty (%)				10.5

* Base year for F-gases is 1995

Table 1b. Uncertainty evaluation excluding LULUCF

IPCC Source category	Gas	Base year (1990) emissions*	Emissions in 2014	Activity data uncertainty	Emission factor uncertainty	Combined uncertainty	Combined uncertainty as % of total national emissions in 2012	Type A sensitivity	Type B sensitivity	Uncertainty in trend in national emissions introduced by emission factor uncertainty	Uncertainty in trend in national emissions introduced by activity data uncertainty	Uncertainty introduced into the trend in total national emissions
		kt CO ₂ eqv.	kt CO ₂ eqv.	%	%	%	%	%	%	%	%	%
1.A.1 Fuel combustion - Energy Industries - Liquid Fuels	CO ₂	7,534.30	1,470.68	2%	3%	3%	0.000	0.033	0.031	0.001	0.001	0.000
1.A.1 Fuel combustion - Energy Industries - Liquid Fuels	CH ₄	6.90	0.93	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Liquid Fuels	N ₂ O	16.11	1.83	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Solid Fuels	CO ₂	174.05	6.74	2%	7%	7%	0.000	0.001	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Solid Fuels	CH ₄	0.05	0.00	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Solid Fuels	N ₂ O	0.82	0.03	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Gaseous Fuels	CO ₂	5,806.05	1,536.17	2%	3%	3%	0.000	0.017	0.033	0.000	0.001	0.000
1.A.1 Fuel combustion - Energy Industries - Gaseous Fuels	CH ₄	2.63	0.70	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Gaseous Fuels	N ₂ O	3.13	0.83	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Other Fossil Fuels	CO ₂	0.00	82.56	2%	7%	7%	0.000	0.002	0.002	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Other Fossil Fuels	CH ₄	0.00	0.57	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Other Fossil Fuels	N ₂ O	0.00	0.90	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Peat	CO ₂	11.06	17.63	2%	7%	7%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Peat	CH ₄	0.00	0.00	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Peat	N ₂ O	0.05	0.08	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000

1.A.1 Fuel combustion - Energy Industries - Biomass	CO ₂			30%	50%	58%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Biomass	CH ₄	0.40	14.44	30%	150%	153%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.1 Fuel combustion - Energy Industries - Biomass	N ₂ O	0.63	22.95	30%	150%	153%	0.000	0.000	0.000	0.001	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Liquid Fuels	CO ₂	3,500.92	75.49	2%	3%	3%	0.000	0.028	0.002	0.001	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Liquid Fuels	CH ₄	3.38	0.06	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Liquid Fuels	N ₂ O	8.06	0.14	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Solid Fuels	CO ₂	171.63	473.11	2%	7%	7%	0.000	0.009	0.010	0.001	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Solid Fuels	CH ₄	0.45	1.23	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Solid Fuels	N ₂ O	0.81	2.20	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Gaseous Fuels	CO ₂	2,048.76	543.13	2%	3%	3%	0.000	0.006	0.012	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Gaseous Fuels	CH ₄	0.93	0.25	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Gaseous Fuels	N ₂ O	1.11	0.29	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Peat	CO ₂	17.53	6.78	2%	7%	7%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Peat	CH ₄	0.01	0.00	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Peat	N ₂ O	0.08	0.03	2%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Biomass	CO ₂			30%	50%	58%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Biomass	CH ₄	0.38	2.56	30%	150%	153%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.2 Fuel combustion - Manufacturing Industries and Construction - Biomass	N ₂ O	0.60	4.08	30%	150%	153%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.a Domestic Aviation	CO ₂	8.16	1.94	10%	2%	10%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.a Domestic Aviation	CH ₄	0.00	0.00	10%	79%	79%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.a Domestic Aviation	N ₂ O	0.07	0.02	10%	110%	110%	0.000	0.000	0.000	0.000	0.000	0.000

1.A.3.b Road Transportation	CO ₂	5,247.15	4,547.12	2%	2%	3%	0.000	0.052	0.097	0.001	0.003	0.000
1.A.3.b Road Transportation	CH ₄	48.11	14.81	2%	40%	40%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.b Road Transportation	N ₂ O	39.09	35.36	2%	50%	50%	0.000	0.000	0.001	0.000	0.000	0.000
1.A.3.c Railways	CO ₂	349.97	174.13	5%	5%	7%	0.000	0.001	0.004	0.000	0.000	0.000
1.A.3.c Railways	CH ₄	0.50	0.25	5%	75%	75%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.c Railways	N ₂ O	40.92	20.36	5%	75%	75%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.d Domestic Navigation - Liquid Fuels	CO ₂	15.49	14.51	5%	3%	6%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.d Domestic Navigation - Liquid Fuels	CH ₄	0.04	0.03	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.d Domestic Navigation - Liquid Fuels	N ₂ O	0.13	0.12	5%	90%	90%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.e.i Other Transportation - Pipeline Transportation	CO ₂	85.50	68.04	5%	7%	9%	0.000	0.001	0.001	0.000	0.000	0.000
1.A.3.e.i Other Transportation - Pipeline Transportation	CH ₄	0.04	0.03	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.e.i Other Transportation - Pipeline Transportation	N ₂ O	0.05	0.04	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.e.ii Other Transportation - Off-road transport	CO ₂	1,678.61	168.31	10%	5%	11%	0.000	0.011	0.004	0.001	0.001	0.000
1.A.3.e.ii Other Transportation - Off-road transport	CH ₄	4.26	0.35	10%	40%	41%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.3.e.ii Other Transportation - Off-road transport	N ₂ O	186.51	19.12	10%	50%	51%	0.000	0.001	0.000	0.001	0.000	0.000
1.A.4 Other Sectors - Liquid Fuels	CO ₂	1,429.58	182.35	3%	3%	4%	0.000	0.008	0.004	0.000	0.000	0.000
1.A.4 Other Sectors - Liquid Fuels	CH ₄	4.17	0.46	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Liquid Fuels	N ₂ O	2.67	0.23	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Solid Fuels	CO ₂	2,760.55	305.30	3%	7%	8%	0.000	0.017	0.006	0.001	0.000	0.000
1.A.4 Other Sectors - Solid Fuels	CH ₄	128.56	14.27	3%	50%	50%	0.000	0.001	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Solid Fuels	N ₂ O	13.00	1.44	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Gaseous Fuels	CO ₂	1,381.52	461.17	3%	3%	4%	0.000	0.002	0.010	0.000	0.000	0.000
1.A.4 Other Sectors - Gaseous Fuels	CH ₄	3.13	1.04	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Gaseous Fuels	N ₂ O	0.75	0.25	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Peat	CO ₂	27.13	109.04	3%	7%	8%	0.000	0.002	0.002	0.000	0.000	0.000
1.A.4 Other Sectors - Peat	CH ₄	1.12	4.91	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors - Peat	N ₂ O	0.11	0.44	3%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors- Biomass	CO ₂			50%	50%	71%	0.000	0.000	0.000	0.000	0.000	0.000
1.A.4 Other Sectors- Biomass	CH ₄	70.28	150.36	50%	150%	158%	0.000	0.003	0.003	0.004	0.002	0.000
1.A.4 Other Sectors- Biomass	N ₂ O	12.97	27.63	50%	150%	158%	0.000	0.000	0.001	0.001	0.000	0.000
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	CO ₂	0.05	0.04	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.B.2.a Fugitive Emissions from Fuels - Oil	CH ₄	10.94	8.19	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000

and Natural Gas - Oil												
1.B.2.a Fugitive Emissions from Fuels - Oil and Natural Gas - Oil	N ₂ O	0.00	0.00	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CO ₂	0.01	0.01	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
1.B.2.b Fugitive Emissions from Fuels - Oil and Natural Gas - Natural Gas	CH ₄	260.55	276.55	5%	50%	50%	0.000	0.004	0.006	0.002	0.000	0.000
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CO ₂	0.58	3.96	5%	75%	75%	0.000	0.000	0.000	0.000	0.000	0.000
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	CH ₄	0.26	1.79	5%	75%	75%	0.000	0.000	0.000	0.000	0.000	0.000
1.B.2.c Fugitive Emissions from Fuels - Venting and flaring	N ₂ O	0.00	0.02	5%	75%	75%	0.000	0.000	0.000	0.000	0.000	0.000
2.A.1 Cement Production	CO ₂	1,668.07	400.83	2%	5%	5%	0.000	0.006	0.009	0.000	0.000	0.000
2.A.2 Lime Production	CO ₂	222.68	41.22	5%	30%	31%	0.000	0.001	0.001	0.000	0.000	0.000
2.A.3 Glass Production	CO ₂	11.70	7.41	7%	5%	9%	0.000	0.000	0.000	0.000	0.000	0.000
2.A.4.a Ceramics	CO ₂	227.92	5.23	5%	5%	7%	0.000	0.002	0.000	0.000	0.000	0.000
2.A.4.b Other use of soda ash	CO ₂	5.32	0.96	15%	5%	16%	0.000	0.000	0.000	0.000	0.000	0.000
2.A.4.d Mineral wool production	CO ₂	6.28	11.27	7%	5%	9%	0.000	0.000	0.000	0.000	0.000	0.000
2.B.1 Ammonia Production	CO ₂	1,255.82	1,875.12	2%	3%	3%	0.000	0.029	0.040	0.001	0.001	0.000
2.B.2 Nitric Acid Production	N ₂ O	893.01	331.76	2%	10%	10%	0.000	0.001	0.007	0.000	0.000	0.000
2.B.8.a Methanol	CO ₂	24.35	0.00	5%	30%	30%	0.000	0.000	0.000	0.000	0.000	0.000
2.B.8.a Methanol	CH ₄	5.24	0.00	5%	30%	30%	0.000	0.000	0.000	0.000	0.000	0.000
2.C.1 Iron and Steel Production	CO ₂	16.98	2.60	10%	10%	14%	0.000	0.000	0.000	0.000	0.000	0.000
2.D.1 Lubricant use	CO ₂	6.06	11.84	5%	50%	50%	0.000	0.000	0.000	0.000	0.000	0.000
2.D.2 Parafin wax use	CO ₂	0.00	2.17	5%	100%	100%	0.000	0.000	0.000	0.000	0.000	0.000
2.D.3 Solvent use	CO ₂	59.79	47.42	30%	20%	36%	0.000	0.000	0.001	0.000	0.000	0.000
2.D.3 Asphalt roofing	CO ₂	0.02	0.01	5%	25%	25%	0.000	0.000	0.000	0.000	0.000	0.000
2.D.3 Road paving with asphalt	CO ₂	0.00	0.00	20%	50%	54%	0.000	0.000	0.000	0.000	0.000	0.000
2.D.3 Urea-based catalyst	CO ₂	0.00	1.18	10%	2%	10%	0.000	0.000	0.000	0.000	0.000	0.000
2.E.1 Semiconductor	SF ₆	0.00	4.75	5%	5%	7%	0.000	0.000	0.000	0.000	0.000	0.000
2.E.3 Photovoltaics	NF ₃	0.00	0.29	5%	5%	7%	0.000	0.000	0.000	0.000	0.000	0.000
2.F.1.a Domestic Refrigeration	HFCs	0.24	1.48	14%	28%	32%	0.000	0.000	0.000	0.000	0.000	0.000
2.F.1.a Commercial Refrigeration	HFCs	1.15	59.75	36%	21%	42%	0.000	0.001	0.001	0.000	0.001	0.000
2.F.1.a Transport Refrigeration	HFCs	0.14	84.19	11%	21%	23%	0.000	0.002	0.002	0.000	0.000	0.000
2.F.1.a Industrial Refrigeration	HFCs	0.29	15.00	30%	15%	34%	0.000	0.000	0.000	0.000	0.000	0.000
2.F.1.a Stationary Air-Conditioning	HFCs	0.15	15.09	36%	28%	46%	0.000	0.000	0.000	0.000	0.000	0.000
2.F.1.b Mobile Air-Conditioning	HFCs	0.22	114.42	11%	21%	23%	0.000	0.002	0.002	0.001	0.000	0.000
2.F.2 Foam Blowing Agents	HFCs	0.00	14.14	30%	30%	42%	0.000	0.000	0.000	0.000	0.000	0.000

2.F.3 Fire Protection	HFCs	0.00	2.15	20%	20%	28%	0.000	0.000	0.000	0.000	0.000	0.000	
2.F.4 Aerosols/metered dose inhalers	HFCs	0.85	6.20	5%	5%	7%	0.000	0.000	0.000	0.000	0.000	0.000	
2.G.1 Manufacture of electrical equipments	SF ₆	0.05	1.06	5%	5%	7%	0.000	0.000	0.000	0.000	0.000	0.000	
2.G.2.b Accelerators	SF ₆	0.00	0.16	5%	5%	7%	0.000	0.000	0.000	0.000	0.000	0.000	
2.G.3.a Medical applications	N ₂ O	93.35	3.05	5%	5%	7%	0.000	0.001	0.000	0.000	0.000	0.000	
2.G.3.b Propellant for pressure and aerosol products	N ₂ O	2.70	2.14	20%	100%	102%	0.000	0.000	0.000	0.000	0.000	0.000	
3.A Enteric Fermentation	CH ₄	4,219.54	1,637.40	5%	20%	21%	0.000	0.001	0.035	0.000	0.002	0.000	
3.B Manure Management	CH ₄	559.35	235.86	19%	20%	27%	0.000	0.000	0.005	0.000	0.001	0.000	
3.B Manure Management	N ₂ O	538.57	168.95	39%	123%	129%	0.000	0.001	0.004	0.001	0.002	0.000	
3.D.1 Direct N ₂ O Emissions From Managed Soils	N ₂ O	1,864.72	1,393.13	8%	85%	86%	0.004	0.014	0.030	0.012	0.003	0.000	
3.D.2 Indirect N ₂ O Emissions From Managed Soils	N ₂ O	581.69	412.48	14%	125%	126%	0.001	0.004	0.009	0.005	0.002	0.000	
3.G Liming	CO ₂	20.59	24.71	10%	50%	51%	0.000	0.000	0.001	0.000	0.000	0.000	
3.H Urea Application	CO ₂	35.68	15.72	30%	50%	58%	0.000	0.000	0.000	0.000	0.000	0.000	
5.A Solid Waste Disposal	CH ₄	1,028.83	834.33	30%	123%	126%	0.003	0.009	0.018	0.011	0.008	0.000	
5.B Biological Treatment of Solid Waste	CH ₄	4.04	20.44	40%	100%	108%	0.000	0.000	0.000	0.000	0.000	0.000	
5.B Biological Treatment of Solid Waste	N ₂ O	2.89	14.62	40%	100%	108%	0.000	0.000	0.000	0.000	0.000	0.000	
5.C Incineration and Open Burning of Waste	CO ₂	2.66	1.96	40%	60%	72%	0.000	0.000	0.000	0.000	0.000	0.000	
5.C Incineration and Open Burning of Waste	CH ₄	0.00	0.00	40%	60%	72%	0.000	0.000	0.000	0.000	0.000	0.000	
5.C Incineration and Open Burning of Waste	N ₂ O	0.08	0.06	40%	60%	72%	0.000	0.000	0.000	0.000	0.000	0.000	
5.D Wastewater Treatment and Discharge	CH ₄	541.86	219.90	59%	73%	93%	0.000	0.000	0.005	0.000	0.004	0.000	
5.D Wastewater Treatment and Discharge	N ₂ O	67.21	45.27	30%	50%	58%	0.000	0.000	0.001	0.000	0.000	0.000	
Total emission		47,093.42	18,968.11	Overall uncertainty (%)			9.3	Trend uncertainty (%)					2.1

* Base year for F-gases is 1995

ANNEX III. Lithuanian energy balance according to the fuel type

Table 3-1. Balance of crude oil, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	502	5 358	13 491	9 217	7 718	6 595	5 465	4 918	4 909	4 892	4 379	3 560	3 514
Biofuel blended													
Import	396 707	131 189	199 709	380 035	349 532	203 786	390 555	358 659	385 276	382 015	364 146	383 408	319 455
Export		335	13 254	6 312	4 907	6 649	5 512	4 831	4 736	3 438	3 408	2 863	2 677
International marine bunkers													
Changes in stocks	2 093	-4 730	-1 169	9 169	-10 033	-890	4 826	904	-1 081	1 857	-90	1 345	439
Gross inland consumption	399 302	131 482	198 777	392 109	342 310	202 842	395 334	359 650	384 368	385 326	365 027	385 450	320 731
Statistical difference		-42											
Transformed in power, heat and other plants:	399 302	131 440	198 777	392 101	342 307	202 835	395 334	359 631	384 357	385 326	365 019	385 450	320 731
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
-in public heat plant	84	167	99										
- in geothermal plants													
- in other industries	399 218	131 273	198 678	392 101	342 307	202 835	395 334	359 631	384 357	385 326	365 019	385 450	320 731
Consumed in energy sector, total:				3	3	3							
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries				3	3	3							
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses				5		4		19	11		8		
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-2. Balance of motor gasoline, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	87 988	37 709	68 838	112 699	98 505	72 271	123 381	119 393	123 626	124 021	115 648	116 610	96 781
Biofuel blended				26	220	483	714	655	445	610	528	433	343
Import	220	14 328	736	1 115	3 836	365	303	405	2 616	1 141	996	667	1 004
Export	42 104	23 601	50 765	95 698	89 376	54 162	104 168	105 355	114 237	114 611	105 566	110 591	89 539
International marine bunkers													
Changes in stocks	-2 725	-1 758	-2 012	-3 193	2 699	275	-1 087	982	506	151	-1 479	1 999	353
Gross inland consumption	43 379	26 678	16 797	14 949	15 884	19 232	19 143	16 080	12 956	11 312	10 127	9 118	8 942
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:			15	5	3						3	3	4
- in peat extraction enterprises				1	1								
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises			15	4	2						3	3	4
Non-energy use													
Distribution and transmission losses	308	176	68	61	71	33	29	27	22	17	17	10	8
Final consumption:	43 071	26 502	16 714	14 883	15 810	19 199	19 114	16 053	12 934	11 295	10 107	9 105	8 930
- in industry	44	88	48	31	30	21	28	18	15	17	14	13	13
- in construction	439	176	101	69	56	47	50	34	28	29	24	17	16
- in transport	41 840	25 887	16 337	14 711	15 652	19 059	18 965	15 948	12 841	11 201	10 025	9 033	8 859
- in agriculture	440	307	170	53	59	62	52	41	43	38	33	32	35
- in fishing													
- in commercial / public services	308	44	58	19	13	10	19	12	7	10	11	10	7
- in households													

Table 3-3. Balance of aviation gasoline, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production													
Biofuel blended													
Import			14	20	20	22	23	17	18	18	18	16	19
Export													
International marine bunkers													
Changes in stocks								1					
Gross inland consumption			14	20	20	22	23	18	18	18	18	16	19
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:			14	20	20	22	23	18	18	18	18	16	19
- in industry													
- in construction													
- in transport			14	20	20	22	23	18	18	18	18	16	19
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-4. Balance of gasoline type jet fuel, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production						-36	-14						
Biofuel blended													
Import			65	3	22	26	5						
Export								5					
International marine bunkers													
Changes in stocks			-65		-22	10	9	5					
Gross inland consumption				3									
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:				3									
- in industry													
- in construction													
- in transport				3									
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-5. Balance of kerosene type jet fuel, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	28 125	9 088	18 566	24 705	23 467	6 495	20 850	9 668	10 352	11 862	10 874	12 168	9 267
Biofuel blended													
Import	387	948	846		584	669		5	837	303	7 263	2 078	1 255
Export	22 956	8 442	16 673	21 406	22 091	4 669	17 443	8 090	9 062	9 882	14 527	11 876	6 587
International marine bunkers													
Changes in stocks	86	129	-1 651	-1 185	419	502	-11	117	115	222	-846	799	-203
Gross inland consumption	5 642	1 723	1 088	2 114	2 379	2 997	3 396	1 700	2 242	2 505	2 764	3 169	3 732
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses				14	14	4	12	4	5	9			
Final consumption:	5 642	1 723	1 088	2 100	2 365	2 993	3 384	1 696	2 237	2 496	2 764	3 169	3 732
- in industry													
- in construction													
- in transport	5 642	1 723	1 080	2 100	2 365	2 993	3 384	1 696	2 237	2 496	2 764	3 169	3 732
- in agriculture													
- in fishing													
- in commercial / public services			5										
- in households			3										

Table 3-6. Balance of transport diesel, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	107 712	42 490	56 232	127 985	103 670	78 465	135 302	134 283	150 168	156 497	150 528	161 248	136 670
Biofuel blended				119	589	1 761	2 127	1 597	1 478	1 600	2 142	2 174	2 383
Import	8 923	9 475	1 670	2 840	3 113	11 840	7 336	5 127	7 882	15 451	19 016	31 433	42 930
Export	49 416	27 364	28 516	92 877	69 973	43 871	94 200	103 262	116 251	128 505	128 727	146 569	129 039
International marine bunkers			942										
Changes in stocks	-1 997	1 573	-4 819	-2 586	724	-1 773	-2 979	661	31	178	1 961	-2 156	217
Gross inland consumption	65 222	26 174	23 625	35 481	38 123	46 422	47 586	38 406	43 308	45 221	44 920	46 130	53 161
Statistical difference		213	853										
Transformed in power, heat and other plants:	7 521	1 742	36										
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant	7 521	1 615	28										
- in public heat plant		127	8										
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:	128	43	136	194	174	127	140	167	144	150	133	181	192
- in peat extraction enterprises	128	43	60	125	110	93	110	131	109	107	99	144	156
- in crude oil extraction enterprises			22	49	44	24	20	25	23	27	23	25	21
- in refineries			5		2	2							4
- in electricity, gas, steam and air conditioning enterprises			49	20	18	8	10	11	12	16	11	12	11
Non-energy use			6										
Distribution and transmission losses	297	128	55	122	89	74	80	69	73	81	70	28	19
Final consumption:	57 276	24 474	24 245	35 165	37 860	46 221	47 366	38 170	43 091	44 990	44 717	45 921	52 950
- in industry	2 124	1 827	510	499	453	378	263	196	190	191	174	223	237
- in construction	2 507	935	613	589	601	615	670	367	382	425	472	406	390
- in transport	34 289	14 489	21 476	32 515	35 362	43 721	44 808	36 197	41 030	42 814	42 412	43 719	50 702
- in agriculture	14 277	4 207	1 327	1 362	1 325	1 429	1 487	1 354	1 444	1 472	1 587	1 503	1 562
- in fishing				14	7	4	4	7	5	9	10	10	10
- in commercial / public services	2 889	2 804	319	186	112	74	134	52	40	79	62	60	49
- in households	1 190	212											

Table 3-7. Balance of heating and other gasoil, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production				2 125	1 824	1 033	1 155	932	1 130	1 216	4 020	3 397	3 930
Biofuel blended								3	2		104	89	98
Import		717		915	818	660	585	617	854	934	874	674	538
Export				985	1 075	192	108	9		6			90
International marine bunkers				770	637	617	617	693	756	867	850	577	347
Changes in stocks		-717	65	-225	-17	-48	-45	28	-7	-59	-150	79	-119
Gross inland consumption			65	1 060	913	836	970	878	1 223	1 218	3 998	3 662	4 010
Statistical difference													
Transformed in power, heat and other plants:			22	102	26	33	31	33	55	40	51	58	38
- in public CHP plant									1		9		
- in auto-producer heat plant													
- in auto-producer CHP plant			22	64	20	30	27	29	52	38	41	56	37
- in public heat plant				38	6	3	4	4	2	2	1	2	1
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:									5	3	3	3	3
- in peat extraction enterprises									5	3	3	3	3
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses					8								
Final consumption:			43	958	879	803	940	845	1 163	1 175	3 944	3 601	3 969
- in industry			7	405	240	198	233	188	220	214	240	200	286
- in construction			7	25	22	31	33	26	47	49	63	60	80
- in transport				226	247	235	251	214	235	179	2 686	2 478	2 588
- in agriculture			23	137	122	153	174	167	230	237	287	268	346
- in fishing				59	157	108	101	79	73	65	72	73	78
- in commercial / public services			6	55	53	58	77	57	69	72	87	97	118
- in households				51	38	20	71	111	289	359	509	425	473

Table 3-8. Balance of liquefied petroleum gases (LPG), TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	12 006	7 636	11 026	21 046	18 812	13 254	18 439	12 679	12 720	11 507	10 235	11 742	10 116
Biofuel blended													
Import	2 208	1 056	3 972	3 110	4 182	5 621	3 725	4 008	5 024	5 202	5 208	4 927	5 184
Export	7 038	4 646	5 793	11 596	10 235	6 928	11 363	7 183	8 114	7 526	6 647	8 303	7 256
International marine bunkers													
Changes in stocks	46	230	-420	163	-59	-44	-74	231	-111	-27	100	-34	-47
Gross inland consumption	7 222	4 276	8 785	12 723	12 700	11 903	10 727	9 735	9 519	9 156	8 896	8 332	7 997
Statistical difference													
Transformed in power, heat and other plants:	46		51	90	101	80	78	88	90	79	80	79	75
- in public CHP plant								1	3			2	
- in auto-producer heat plant													
- in auto-producer CHP plant			21	19	19	17	16	17	18	30	31	30	27
- in public heat plant	46		31	71	82	63	62	70	69	49	49	47	48
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:	552	138	36	4	2	3							
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries	552	138	22			2							
- in electricity, gas, steam and air conditioning enterprises			14	4	2	1							
Non-energy use													
Distribution and transmission losses	322	92	103	47	47	38	32	39	26	15	21	17	16
Final consumption:	6 302	4 046	8 595	12 580	12 550	11 782	10 617	9 608	9 403	9 062	8 795	8 236	7 906
- in industry			201	229	292	324	292	250	273	259	320	325	269
- in construction	92	46	74	77	93	94	133	98	122	48	32	35	43
- in transport	920	1 058	5 032	9 593	9 810	9 708	8 615	7 681	7 275	6 790	6 400	6 147	5 966
- in agriculture	230	46	19	38	41	43	43	46	41	63	68	65	105
- in fishing													
- in commercial / public services	460	92	62	23	22	22	16	8	6	25	14	23	26
- in households	4 600	2 804	3 207	2 620	2 292	1 591	1 518	1 525	1 686	1 877	1 961	1 641	1 497

Table 3-9. Balance of fuel oil – high sulphur (>1%), TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	133 867	33 356	39 422	71 994	77 669	55 306	72 632	61 764	65 373	67 961	66 546	72 862	57 935
Biofuel blended													
Import	293 464	47 887	4 110	5 056	4 860	3 748	3 059	6 288	7 883	1 707	813	315	167
Export	277 769	8 148	16 608	56 627	66 524	44 361	68 981	56 675	60 139	64 685	63 173	68 752	56 058
International marine bunkers	3 894	5 780	2 857	4 712	4 471	3 622	2 878	4 017	2 801	1 281	812	46	
Changes in stocks	-8 951	-11 159	-4 689	-1 824	2 202	159	3 576	994	-3 450	1 270	5 997	543	1 420
Gross inland consumption	136 717	56 156	19 378	13 887	13 736	11 230	7 408	8 354	6 866	4 972	9 371	4 922	3 464
Statistical difference		40	5 592										
Transformed in power, heat and other plants:	70 406	39 377	14 650	5 536	6 668	3 439	2 954	4 742	4 648	1 564	5 811	1 938	857
- in public CHP plant	44 195	20 511	7 233	3 837	5 201	666	2 383	4 160	4 157	942	5 284	1 349	346
- in auto-producer heat plant	642	201	27		2	1 400				405	279	418	383
- in auto-producer CHP plant	20 190	16 618	6 813	1 659	1 429	1 314	542	581	491	217	248	171	128
- in public heat plant	5 379	2 047	577	40	36	59	29	1					
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:	8 068	3 693	4 899	6 716	5 746	7 474	4 136	3 468	2 005	3 255	3 396	2 865	2 512
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries	8 068	3 693	4 899	6 716	5 746	7 474	4 136	3 468	2 005	3 255	3 392	2 865	2 508
- in electricity, gas, steam and air conditioning enterprises											4		4
Non-energy use													
Distribution and transmission losses	361			38	3	2	4				3	3	1
Final consumption:	57 882	13 126	5 421	1 597	1 319	315	314	144	213	153	161	116	94
- in industry	43 993	11 520	5 202	1 486	1 238	241	245	140	148	79	155	115	91
- in construction	1 044	201	11	17	14	9	9						
- in transport			3	4	10	6	4	4					
- in agriculture	1 084	201	114	80	50	44	35		41	40			
- in fishing													
- in commercial / public services	11 641	1 204	91	10	7	15	21		24	34	6	1	3
- in households	120												

Table 3-10. Balance of fuel oil – low sulphur (<1%), TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production						183	4 838	5 028	4 306	2 413	1 563	382	343
Biofuel blended													
Import			1 407	1 191	1 105	1 634	1 821	1 123	2 779	4 630	5 339	3 589	333
Export				23		2		6	40	46	55	15	15
International marine bunkers			29	451	573	705	227	575	2 224	3 735	3 344	3 003	130
Changes in stocks			56	-60	23	-449	-585	447	-308	-338	-1 515	637	685
Gross inland consumption			1 434	657	555	661	5 847	6 017	4 513	2 924	1 988	1 590	1 216
Statistical difference													
Transformed in power, heat and other plants:			755	328	468	296	1 547	2 090	1 232	818	727	1 040	920
- in public CHP plant							292	377	18		262	819	624
- in auto-producer heat plant							987	1 426	1 017	602	181	37	
- in auto-producer CHP plant			713	318	468	274	268	263	197	213	282	183	296
- in public heat plant			42	10		22		24		3	2	1	
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:							4 022	3 697	3 042	1 787	948	280	
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries							4 022	3 697	3 042	1 787	948	280	
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses						5							
Final consumption:			679	329	87	360	278	231	239	319	313	270	296
- in industry			363	220	40	241	162	153	147	210	237	213	244
- in construction			47	93	38	87	100	54	75	72	35	37	31
- in transport					4	3	4	7					
- in agriculture			15	2	2	13	5	4	5	22	19	15	18
- in fishing				9									
- in commercial / public services			254	5	3	16	7	13	12	15	22	5	3
- in households													

Table 3-11. Balance of refinery gas (not liquefied), TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	11 032	5 318	8 253	15 250	12 884	9 409	14 029	13 418	14 127	13 324	13 300	14 875	13 065
Biofuel blended													
Import													
Export													
International marine bunkers													
Changes in stocks													
Gross inland consumption	11 032	5 318	8 253	15 250	12 884	9 409	14 029	13 418	14 127	13 324	13 300	14 875	13 065
Statistical difference													
Transformed in power, heat and other plants:						71	92	88	109	101	172	121	99
- in public CHP plant													
- in auto-producer heat plant											172	121	99
- in auto-producer CHP plant													
-in public heat plant						71	92	88	109	101			
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:	11 032	5 318	8 253	15 250	12 884	9 338	13 937	13 330	14 018	13 223	13 128	14 754	12 966
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries	11 032	5 318	8 253	15 250	12 884	9 338	13 937	13 330	14 018	13 223	13 128	14 754	12 966
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-12. Balance of bitumen, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	9 534	1 108	3 117	6 804	6 421	3 957	5 829	4 576	4 938	5 158	4 288	4 904	3 555
Biofuel blended													
Import	40	791	474	1 150	1 836	3 965	3 321	828	1 814	2 208	1 623	1 792	1 567
Export	1 662	356	839	2 587	2 746	1 729	2 884	2 359	2 896	3 736	2 757	3 444	2 164
International marine bunkers													
Changes in stocks	40	39	71	28	-35	-155	176	110	-165	162	-286	164	40
Gross inland consumption	7 952	1 582	2 823	5 395	5 476	6 038	6 442	3 155	3 691	3 792	2 868	3 416	2 998
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use	7 952	1 582	2 823	5 395	5 476	6 038	6 442	3 155	3 691	3 792	2 868	3 416	2 998
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-13. Balance of lubricants, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production			1 226	847	931	1 093	1 218	1 257	1 504	1 675	1 790	1 755	1 886
Biofuel blended													
Import	413	620	602	1 121	1 296	1 252	1 175	1 150	1 709	2 181	2 891	1 641	1 268
Export			924	843	1 113	1 352	1 444	1 711	2 350	2 950	3 795	2 555	2 358
International marine bunkers					12								
Changes in stocks			129	-14	-53	16	39	58	-17	-34	-53	33	11
Gross inland consumption	413	620	1 033	1 111	1 049	1 009	988	754	846	872	833	874	807
Statistical difference			-84										
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use	413	620	949	1 111	1 049	1 009	988	754	846	872	833	874	807
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-14. Balance of petroleum coke, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	1 962	1 393	2 740	3 940	3 345	3 199	4 113	3 892	3 856	3 883	3 433	3 738	3 528
Biofuel blended													
Import				1 100			1 006		9		13		
Export													
International marine bunkers													
Changes in stocks				-1 054	325	793	-788	685	102				
Gross inland consumption	1 962	1 393	2 740	3 986	3 670	3 992	4 331	4 577	3 967	3 883	3 446	3 738	3 528
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:	1 962	1 393	2 740	3 940	3 345	3 199	4 113	3 892	3 856	3 883	3 433	3 737	3 528
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries	1 962	1 393	2 740	3 940	3 345	3 199	4 113	3 892	3 856	3 883	3 433	3 737	3 528
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:				46	325	793	218	685	111		13	1	
- in industry				46	325	793	218	685	111		13	1	
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-15. Balance of refinery feedstock, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production		8 513	418	1 827	1 108	34	370	126				365	
Biofuel blended													
Import	1 304	17 209	13 934	3 568	13 464	44 038	13 120	12 327	12 171	18 931	23 087	25 134	22 010
Export											9	6	11
International marine bunkers													
Changes in stocks	-1 220	-8 470	213	-1 121	-1 335	663	152	670	614	673	-352	-434	709
Gross inland consumption	84	17 252	14 565	4 274	13 237	44 735	13 642	13 123	12 785	19 604	22 726	25 059	22 708
Statistical difference		-43											
Transformed in power, heat and other plants:	84	17 209	14 565	4 274	13 237	44 735	13 642	13 123	12 785	19 604	22 726	25 059	22 708
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
-in public heat plant													
- in geothermal plants													
- in other industries	84	17 209	14 565	4 274	13 237	44 735	13 642	13 123	12 785	19 604	22 726	25 059	22 708
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-16. Balance of naphtha, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production				3 477	2 436	2 071	1 890	2 031					
Biofuel blended													
Import													
Export				3 257	2 656	2 071	1 890	2 031					
International marine bunkers													
Changes in stocks				-220	220								
Gross inland consumption													
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-17. Balance of orimulsion, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production													
Biofuel blended													
Import		729	1 383	1 681	1 655								
Export													
International marine bunkers													
Changes in stocks			-734	700	-461	1 508	40						
Gross inland consumption		729	649	2 381	1 194	1 508	40						
Statistical difference													
Transformed in power, heat and other plants:		729	649	2 381	1 194	1 508	40						
- in public CHP plant		729	649	2 381	1 194	1 508	40						
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-18. Balance of shale oil, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production													
Biofuel blended													
Import				73	90	81	172	103	19				
Export							77	36	18				
International marine bunkers													
Changes in stocks				-7	-2	-7	-9	-7	31				
Gross inland consumption				66	88	73	86	60	32				
Statistical difference													
Transformed in power, heat and other plants:				9	29	18	8	9	10				
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant				9	8	8		1	1				
- in public heat plant					21	10	8	8	9				
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:							7						
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises							7						
Non-energy use													
Distribution and transmission losses													
Final consumption:				57	59	55	71	51	22				
- in industry				13	40	22	27						
- in construction													
- in transport													
- in agriculture				23		4	8	15	4				
- in fishing													
- in commercial / public services				21	19	29	36	36	18				
- in households													

Table 3-19. Balance of coking coal, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production													
Biofuel blended													
Import	31 752	6 506	176	53	176	25	728	2 167	4 343	8 929	8 010	10 427	8 326
Export		50						27	438	464	575	865	817
International marine bunkers													
Changes in stocks	980	2 889							-275	-970	-4	-730	178
Gross inland consumption	32 732	9 345	176	53	176	25	728	2 140	3 630	7 495	7 431	8 832	7 687
Statistical difference													
Transformed in power, heat and other plants:	1 834	452	25	53	50	25	50	58	55	51	71	81	67
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant	904	126	25	53	50	25	50	58	32	44	71	81	67
- in public heat plant	930	326							23	7			
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use		25											
Distribution and transmission losses		25							0	8	9	10	5
Final consumption:	30 898	8 843	151		126		678	2 082	3 575	7 436	7 351	8 741	7 615
- in industry	1 583	703	137		126		301	1 240	2 860	3 750	4 353	5 083	4 418
- in construction	226	25	14						0	11	7	7	4
- in transport													
- in agriculture	1 557	50							3	23	16	35	80
- in fishing													
- in commercial / public services	12 359	6 632					176	566	406	2 105	1 302	1 583	1 352
- in households	15 173	1 433					201	276	305	1 547	1 673	2 033	1 761

Table 3-20. Balance of anthracite, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production													
Biofuel blended													
Import			100				75	396	90	21	33	62	18
Export									1	1	5	5	8
International marine bunkers													
Changes in stocks									-74	71	-4	-15	16
Gross inland consumption			100				75	396	15	91	24	42	26
Statistical difference													
Transformed in power, heat and other plants:			100					24					
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant			100										
- in public heat plant								24					
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:							75	372	15	91	24	42	26
- in industry							75	372	5	91	24	42	22
- in construction									2				
- in transport													
- in agriculture									3				2
- in fishing													
- in commercial / public services									4				
- in households									1				2

Table 3-21. Balance of sub-bituminous coal, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production													
Biofuel blended													
Import			2 698	6 618	8 781	8 193	7 960	2 567	3 248	857	24	58	30
Export				37	71	181	195	359	406	127		2	31
International marine bunkers													
Changes in stocks			11	-168	115	579	-1 133	1 009	672	-46	346	10	21
Gross inland consumption			2 709	6 413	8 825	8 591	6 632	3 217	3 514	684	370	66	20
Statistical difference													
Transformed in power, heat and other plants:			150	207	205	200	141	52	100	85	49	27	4
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant			81	147	141	133	92	36	66	85	49	27	4
-in public heat plant			69	60	64	67	49	16	34				
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:			4										
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises			4										
Non-energy use			7	3									
Distribution and transmission losses			11	6	17	12	7	10	8				
Final consumption:			2 537	6 197	8 603	8 379	6 484	3 155	3 406	599	321	39	16
- in industry			5	3 059	4 316	4 610	3 736	688	207	16	19	4	3
- in construction				18	23	17	11	5	2	1	1		
- in transport													
- in agriculture			14	36	50	19	15	14	8	3	2		
- in fishing													
- in commercial / public services			1 867	2 036	2 762	2 053	1 290	1 257	1 417	22	6	5	2
- in households			651	1 048	1 452	1 680	1 432	1 191	1 772	557	293	30	11

Table 3-22. Balance of coke, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production													
Biofuel blended													
Import			445	440	786	712	456	294	466	517	543	551	499
Export													
International marine bunkers													
Changes in stocks			-52	96	-69	-2	31	27	7	5	11	10	-21
Gross inland consumption			393	536	717	710	487	321	473	522	554	561	478
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use			47	2									
Distribution and transmission losses													
Final consumption:			346	534	717	710	487	321	473	522	554	561	478
- in industry			346	534	717	710	487	321	473	522	554	561	478
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-23. Balance of lignite, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production													
Biofuel blended													
Import			15	40	36		1		14	22		22	13
Export													
International marine bunkers													
Changes in stocks			1	2	4	3			-6	-10	2	1	-7
Gross inland consumption			16	42	40	3	1		8	12	2	23	6
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:			16	42	40	3	1		8	12	2	23	6
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services			16	25	28	2	1			4		6	5
- in households				17	12	1			8	8	2	17	1

Table 3-24. Balance of peat, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	580	600	494	825	640	616	790	616	364	492	709	985	1 181
Biofuel blended													
Import					6					2			
Export			76	1	36	14	59	81	104	142	153	137	109
International marine bunkers													
Changes in stocks	116	222	51	-235	-60	182	-282	-159	94	140	-68	-44	-565
Gross inland consumption	696	822	469	589	550	784	449	376	354	492	488	804	507
Statistical difference													
Transformed in power, heat and other plants:	445	357	258	299	380	688	345	285	202	248	188	551	163
- in public CHP plant					22	302	6	1			4		36
- in auto-producer heat plant													
- in auto-producer CHP plant	67	96	80	128	133	149	111	135	102	132	99	438	127
- in public heat plant	39	10	14			40				3			
- in geothermal plants													
- in other industries	339	251	163	171	225	197	228	149	100	113	85	113	96
Consumed in energy sector, total:		126	36	11	7	3				13	25	6	6
- in peat extraction enterprises			20	11	5	3						6	6
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises		126	15		2					13	25		
Non-energy use													
Distribution and transmission losses	9	10	5	7		24							
Final consumption:	242	329	170	272	163	69	104	91	152	231	275	247	242
- in industry	155	174	43	7	3	5	6	5	9	37	40	40	38
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services	87	58		21	15	10	26	24	44	85	112	99	97
- in households		97	127	244	145	54	72	62	99	109	123	108	107

Table 3-25. Balance of peat briquettes and peat pellets, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	239	186	138	147	191	176	201	128	84	101	73	96	81
Biofuel blended													
Import		119	2	143	192	314	466	532	696	899	1 009	1 150	762
Export					5	2	1	1		22	168	116	159
International marine bunkers													
Changes in stocks	-53	-13	-1	-35	5	-2	-16	37	-44	-160	64	-120	184
Gross inland consumption	186	292	139	255	383	486	650	696	736	818	978	1 010	868
Statistical difference													
Transformed in power, heat and other plants:				9	2		5	13	3		3	3	
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant				2	1		3	3	1		2	3	
- in public heat plant				7	1		2	10	2		1		
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:			2										
- in peat extraction enterprises			2										
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses					1								
Final consumption:	186	293	137	246	380	486	645	683	733	818	975	1 007	868
- in industry	13	53		8	11	19	16	7	27	27	34	28	27
- in construction						1							
- in transport													
- in agriculture				3	3	11	7	4	16	17	18	21	19
- in fishing													
- in commercial / public services	27	53	1	28	39	113	156	185	193	238	295	325	307
- in households	146	186	136	207	327	343	466	487	497	536	628	633	515

Table 3-26. Balance of paraffin and waxes, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production													
Biofuel blended													
Import				176	151	165	249	295	520	857	1 139	1 264	1 328
Export				106	101	79	153	204	384	647	906	1 161	1 167
International marine bunkers													
Changes in stocks					4	-1		2	3	-46	-61	38	-13
Gross inland consumption				70	54	85	96	93	139	164	172	141	148
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use				70	54	85	96	93	139	164	172	141	148
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-27. Balance of natural gas, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production													
Biofuel blended													
Import	201 957	84 929	86 453	104 363	103 830	124 570	104 651	91 655	104 017	114 115	111 200	90 670	89 759
Export	6 102												13
International marine bunkers													
Changes in stocks			-37	-671	-1 081	-3 501	4 022	-326	304	-298	-68	-62	-3 296
Gross inland consumption	195 855	84 929	86 416	103 692	102 749	121 069	108 673	91 329	104 321	113 817	111 132	90 608	86 450
Statistical difference													
Transformed in power, heat and other plants:	105 124	41 480	47 241	57 134	53 699	50 067	45 905	45 311	58 186	48 005	43 280	35 499	27 756
- in public CHP plant	62 825	17 664	29 650	42 536	39 866	36 504	34 538	34 377	45 755	37 219	31 684	26 622	19 871
- in auto-producer heat plant	1 787	473	324	1 160	1 053	940	256	990	1 003	954	1 881	1 045	1 896
- in auto-producer CHP plant	34 248	21 952	16 272	11 414	11 391	11 918	10 034	8 818	10 525	8 994	8 977	7 317	5 473
-in public heat plant	6 265	1 391	688	667	578	590	746	521	558	568	470	391	372
- in geothermal plants				819	420	90	30	503	345	270	268	124	144
- in other industries			307	538	391	25	301	102					
Consumed in energy sector, total:			140	130	100	99	98	72	65	199	130	72	58
- in peat extraction enterprises													
- in crude oil extraction enterprises			3	3	3	3	2	2	3	3	3	2	3
- in refineries			28	28	5	5	1	6	4	2	19	20	18
- in electricity, gas, steam and air conditioning enterprises			109	99	92	91	95	64	58	194	108	50	37
Non-energy use	26 934	20 167	22 716	24 288	25 024	46 416	39 254	24 153	22 309	43 370	44 773	34 355	39 220
Distribution and transmission losses	1 688	1 935	1 119	420	69	30		4	5	4	3		
Final consumption:	62 109	21 347	15 200	21 720	23 857	24 457	23 416	21 789	23 756	22 239	22 946	20 682	19 416
- in industry	36 065	8 916	8 285	11 620	12 455	11 819	11 326	10 540	11 500	11 055	11 648	10 053	9 377
- in construction	1 030	219	266	513	611	655	677	424	501	459	490	509	457
- in transport				647	1 092	1 145	1 004	1 015	1 028	862	1 330	1 250	1 232
- in agriculture	2 946	1 197	991	1 192	1 581	1 653	1 431	1 132	1 309	1 273	1 156	1 058	869
- in fishing													
- in commercial / public services	12 831	3 319	1 302	2 118	2 254	3 020	2 874	2 603	2 793	2 520	2 652	2 656	2 452
- in households	9 237	7 696	4 356	5 630	5 864	6 165	6 104	6 075	6 625	6 070	5 670	5 156	5 029

Table 3-28. Balance of charcoal, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production				18	19	13	13	9	24	19	19	19	28
Biofuel blended													
Import				14	25	38	70	69	61	58	43	58	126
Export				15	16	16	18	43	38	36	34	36	93
International marine bunkers													
Changes in stocks				3	-4	1	-2	5	1			-3	-17
Gross inland consumption				20	24	36	63	40	48	41	28	38	44
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:				20	24	36	63	40	48	41	28	38	44
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services				20	24	36	63	40	48	41	28	38	44
- in households													

Table 3-29. Balance of wood and wood waste, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	11 930	19 632	27 324	35 293	37 650	36 839	39 022	41 787	41 734	40 955	41 291	43 355	46 292
Biofuel blended													
Import		61	4	727	1 003	957	1 227	1 972	2 008	4 603	4 623	4 949	5 185
Export			255	710	1 695	1 923	2 224	4 705	5 102	5 431	4 871	5 427	5 761
International marine bunkers													
Changes in stocks	-14	-381	-54	-498	-503	15	-113	123	444	-2 044	722	-188	-530
Gross inland consumption	11 916	19 312	27 019	34 812	36 455	35 888	37 912	39 177	39 084	38 083	41 765	42 689	45 186
Statistical difference				457	225								
Transformed in power, heat and other plants:	527	558	1 640	6 273	7 272	7 552	8 899	10 375	10 408	9 792	12 952	14 797	18 646
- in public CHP plant				191	784	1 597	1 864	2 331	2 472	2 359	3 785	6 073	6 058
- in auto-producer heat plant													
- in auto-producer CHP plant	274	156	1 060	4 906	5 501	4 927	6 195	7 349	7 121	6 691	7 976	7 679	9 961
-in public heat plant	253	402	580	1 128	939	992	813	680	772	706	1 149	1 002	2 627
- in geothermal plants													
- in other industries				48	48	36	27	15	43	36	42	43	44
Consumed in energy sector, total:			25	13	16	6	2	4	19	12	11	6	9
- in peat extraction enterprises				13	9	4		0	4	4	6	3	9
- in crude oil extraction enterprises													
- in refineries					4	1	1	1	1	2	4	3	
- in electricity, gas, steam and air conditioning enterprises			25		3	1	1	3	14	6	1		
Non-energy use													
Distribution and transmission losses			12	4	17								
Final consumption:	11 389	18 754	25 342	28 979	29 375	28 330	29 011	28 798	28 657	28 279	28 802	27 886	26 487
- in industry	453	756	1 218	4 007	3 586	3 480	3 273	2 631	2 920	3 027	3 400	3 380	3 313
- in construction	51	105	100	185	232	217	177	125	143	145	157	125	99
- in transport													
- in agriculture	187	211	272	253	264	320	371	400	399	463	437	400	436
- in fishing													
- in commercial / public services	1 699	1 104	1 703	1 278	1 256	1 189	1 197	1 185	1 178	1 276	1 344	1 390	1 358
- in households	8 999	16 578	22 049	23 256	24 037	23 124	23 993	24 457	24 017	23 368	23 464	22 591	21 281

Table 3-30. Balance of agricultural waste, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production				96	104	150	174	184	228	212	242	238	457
Biofuel blended													
Import													8
Export													269
International marine bunkers													
Changes in stocks				16	-31	33	-39	-9	11	-9	-34	24	6
Gross inland consumption				112	73	183	135	175	239	203	208	262	202
Statistical difference													
Transformed in power, heat and other plants:				64	60	63	88	109	144	113	112	99	105
- in public CHP plant											1	2	2
- in auto-producer heat plant													
- in auto-producer CHP plant				55	43	52	77	94	131	100	101	97	103
- in public heat plant				9	17	11	11	15	13	13	10		
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:					1			7	3	1			
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries								7					
- in electricity, gas, steam and air conditioning enterprises					1				3	1			
Non-energy use													
Distribution and transmission losses													
Final consumption:				48	12	120	47	59	92	89	96	163	97
- in industry				41	10	76	19	8	11	7	6	13	5
- in construction													
- in transport													
- in agriculture				2		44	28	51	56	56	59	88	63
- in fishing													
- in commercial / public services									18	25	28	58	29
- in households				5	2				7	1	3	4	

Table 3-31. Balance of bioethanol, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production				195	268	402	463	661	1 060	565	656	730	407
Biofuel blended													
Import					70	116	250	94	106	234	286	214	32
Export				162	115	8	66	106	649	320	483	562	120
International marine bunkers													
Changes in stocks				-7	2	-16	9	-46	-3	-14	6	19	41
Gross inland consumption				26	225	494	656	603	514	465	465	401	360
Statistical difference													
Transformed in power, heat and other plants:					153	294	311	1					
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries					153	294	311	1					
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use							11	18	78	68	100	117	78
Distribution and transmission losses													
Final consumption:				26	72	200	334	584	436	397	365	284	282
- in industry													
- in construction													
- in transport				26	72	200	334	584	436	397	365	284	282
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-32. Balance of biodiesel, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production				260	383	917	2 390	3 873	3 299	2 956	3 948	4 340	4 429
Biofuel blended													
Import					227	1 156	1 639	1 222	527	1 273	1 413	1 406	1 502
Export				168		235	1 955	3 434	2 538	2 726	3 131	3 571	3 434
International marine bunkers													
Changes in stocks				27	-21	-76	-158	-80	166	-22	-62	-2	-88
Gross inland consumption				119	589	1 762	1 916	1 581	1 454	1 481	2 168	2 173	2 409
Statistical difference													
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:				119	589	1 762	1 916	1 581	1 454	1 481	2 168	2 173	2 409
- in industry													
- in construction													
- in transport				119	589	1 762	1 916	1 581	1 454	1 481	2 168	2 173	2 409
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-33. Balance of sludge biogas, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production				57	62	69	70	89	125	129	130	150	290
Biofuel blended													
Import													
Export													
International marine bunkers													
Changes in stocks													
Gross inland consumption				57	62	69	70	89	125	129	130	150	290
Statistical difference													
Transformed in power, heat and other plants:				36	36	39	35	37	55	56	52	67	105
- in public CHP plant				17	30	33	21	9	8	13	10	14	16
- in auto-producer heat plant				3	6	6	14	28	47	43	42	53	89
- in auto-producer CHP plant				16									
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:				21	26	30	35	52	70	73	78	83	185
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services				21	26	30	35	52	70	73	78	83	185
- in households													

Table 3-34. Balance of landfill biogas, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production							17	56	83	245	257	299	323
Biofuel blended													
Import													
Export													
International marine bunkers													
Changes in stocks													
Gross inland consumption							17	56	83	245	257	299	323
Statistical difference													
Transformed in power, heat and other plants:							17	56	83	237	256	292	320
- in public CHP plant									35	152	124	226	187
- in auto-producer heat plant							17	56	48	85	132	66	133
- in auto-producer CHP plant													
-in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:									0	8	1	7	3
- in industry												2	1
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services									0	8	1	5	2
- in households													

Table 3-35. Balance of other biogas from agricultural waste, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production				20	21	34	38	50	210	89	97	200	263
Biofuel blended													
Import													
Export													
International marine bunkers													
Changes in stocks													
Gross inland consumption				20	21	34	38	50	210	89	97	200	263
Statistical difference													
Transformed in power, heat and other plants:				7	6	9	14	15	91	42	45	114	178
- in public CHP plant													
- in auto-producer heat plant				7	6	9	14	15	91	42	45	114	178
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:				13	15	25	24	35	119	47	52	86	85
- in industry					6	13	10	18	104	41	52	86	85
- in construction													
- in transport													
- in agriculture				13	9	12	14	17	15	6			
- in fishing													
- in commercial / public services													
- in households													

Table 3-36. Balance of emulsified vacuum residue, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production							557			19		40	
Biofuel blended													
Import													
Export										19		40	
International marine bunkers													
Changes in stocks													
Gross inland consumption							557						
Statistical difference													
Transformed in power, heat and other plants:							557						
- in public CHP plant							557						
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-37. Balance of sulphur (from oil), TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production	960	400	1 228	2 971	2 445	1 705	2 956	2 789	2 939	3 068	2 922	3 258	3 064
Biofuel blended													
Import													
Export			14	154			38	561	49		19		1 456
International marine bunkers													
Changes in stocks		-280	-101	-75	78	-90	102	11	6	3	-65	87	11
Gross inland consumption	960	120	1 113	2 742	2 523	1 615	3 020	2 239	2 896	3 071	2 838	3 345	1 619
Statistical difference		280											
Transformed in power, heat and other plants:													
- in public CHP plant													
- in auto-producer heat plant													
- in auto-producer CHP plant													
- in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use	960	400	1 113	2 742	2 523	1 615	3 020	2 239	2 896	3 071	2 838	3 345	1 619
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-38. Balance of industrial waste, TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production												155	258
Biofuel blended													
Import													
Export													
International marine bunkers													
Changes in stocks													
Gross inland consumption												155	258
Statistical difference													
Transformed in power, heat and other plants:												155	258
- in public CHP plant												155	258
- in auto-producer heat plant													
- in auto-producer CHP plant													
-in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-39. Balance of municipal waste (non-biomass fraction), TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production												475	495
Biofuel blended													
Import													
Export													
International marine bunkers													
Changes in stocks												-7	3
Gross inland consumption												468	498
Statistical difference													
Transformed in power, heat and other plants:												468	498
- in public CHP plant												468	498
- in auto-producer heat plant													
- in auto-producer CHP plant													
-in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

Table 3-40. Balance of municipal waste (biomass fraction), TJ

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Production												468	475
Biofuel blended													
Import													
Export													
International marine bunkers													
Changes in stocks												-7	2
Gross inland consumption												461	477
Statistical difference													
Transformed in power, heat and other plants:												461	477
- in public CHP plant												461	477
- in auto-producer heat plant													
- in auto-producer CHP plant													
-in public heat plant													
- in geothermal plants													
- in other industries													
Consumed in energy sector, total:													
- in peat extraction enterprises													
- in crude oil extraction enterprises													
- in refineries													
- in electricity, gas, steam and air conditioning enterprises													
Non-energy use													
Distribution and transmission losses													
Final consumption:													
- in industry													
- in construction													
- in transport													
- in agriculture													
- in fishing													
- in commercial / public services													
- in households													

ANNEX IV. Summary of the study "Determination of national GHG emission factors for energy sector", performed by Lithuanian Energy Institute on August 2012

During combustion a great share of carbon is removed immediately as CO₂, therefore conditions of combustion process practically have not influence on CO₂ emission factors. CO₂ emission factors depend on type of fuel, i.e. on the amount of carbon content in this fuel. After the summarization of performed comparative analysis of applied emission factors in other EU countries, summarization of data provided by the operators under the EU ETS system and aggregation of results provided by the accredited research laboratories, in this chapter of the study determined country specific CO₂ emission factors for energy sector (fuel combustion). Recommended values of country specific CO₂ emission factors are set considering to the results of analysis performed. Besides, determined values of emission factors have to assure low as possible uncertainty of emission factors.

CH₄ and N₂O emission factors are influenced by type of technology, operating conditions, age of equipment and other combustion conditions, therefore values of these emission factors significantly differ between the individual technologies. Seeking to precisely set country specific CH₄ and N₂O emission factors of energy technologies used in Lithuania, it is essential to perform comprehensive and multiplex measurements of emissions by differencing in accordance to the group of equipment and fuel type. However, the measurements have to be long-lasting, therefore in this study recommended values of CH₄ and N₂O emission factors are based in accordance to the results of analysis performed and default IPCC (1996) values.

Recommended CO₂, CH₄ and N₂O emission factors for energy sector are provided in Tables 4-1.

Recommended country specific CO₂ emission factor for natural gas is determined considering to the chemical composition of natural gas that was provided by Central Calibration and Test Laboratory of JSC "Lietuvos dujos", and considering the carbon content in natural gas.

Values of national CO₂ emission factors for coking coal, residual fuel oil, petroleum coke, orimulsion, non liquefied petroleum gas and coke are set on the basis of data provided by the operators under EU ETS and considering to the Tier 3 reliability that ensures the lowest uncertainty of emission factor. Sustaining to data base of EU ETS, in the some cases it is possible to apply emission factors set at the plant-specific level. For example, this can be applied for orimulsion combusted in Lithuania Thermal Power Plant or residual fuel oil combusted in CHP of the JSC "ORLEN Lietuva". For the national GHG inventory preparation it is essential to consider the possibility to apply plant-specific emission factors, because the application of these emission factors enables to use higher Tiers in national GHG inventory.

Values of national CO₂ emission factors for gasoline, diesel, gasoil, jet kerosene and liquefied petroleum gas are determined on the basis of measurement performed by accredited Laboratory of Quality Research Centre of JSC „ORLEN Lietuva“.

Value of CO₂ emission factor for shale oil is based on national Estonian emission factor considering to the fact that shale oil is imported to Lithuania from Estonia.

Country specific CO₂ emission factors for crude oil, waste oil and peat are determined taking into consideration results of performed measurements and calculations provided in various national studies.

Country specific CO₂ emission factor for wood and wood waste is specified by performed measurements in Laboratory of Heat Equipment Research and Testing (Lithuanian Energy Institute).

Recommended value of CO₂ emission factor for biogas is chosen in accordance to the results of analysis on applied emission factors in other EU countries and considering to the results of long-lasting research analysis performed in other countries. However, seeking to ensure low uncertainty of emission factor for biogas, it is essential to perform long-lasting measurements for different types of biogas in Lithuania.

Table 4-1. **Recommended GHG emission factors for energy industries**

1.AA.1 Energy industries sector	CO₂, t/TJ	CH₄, t/TJ	N₂O, t/TJ
Waste oil	77,11	0,003	0,0006
Gasoline	72,97	0,003	0,0006
Diesel	72,89	0,003	0,0006
Gasoil	72,89	0,003	0,0006
Residual fuel oil	77,60	0,003	0,0006
Petroleum coke	94,06	0,003	0,0006
Non liquefied petroleum gas	55,82	0,003	0,0006
Orimulsion	81,74	0,003	0,0006
Shale oil	77,40	0,003	0,0006
Liquefied petroleum gas	65,42	0,003	0,0006
Crude oil	77,74	0,003	0,0006
Coking coal	94,90	0,001	0,0014
Peat	104,34	0,001	0,0015
Natural gas	55,23	0,001	0,0001
Biogas	58,45	0,001	0,0001
Wood and wood waste	109,90	0,03	0,004

The reliabilities of recommended national CO₂ emission factors are assessed considering to the default IPCC (1996) emission factors and results of the comparative analysis of emission factors applied in other EU countries. The comparison of recommended national CO₂ emission factors with default IPCC (1996) emission factors is presented in Figure 4-1.

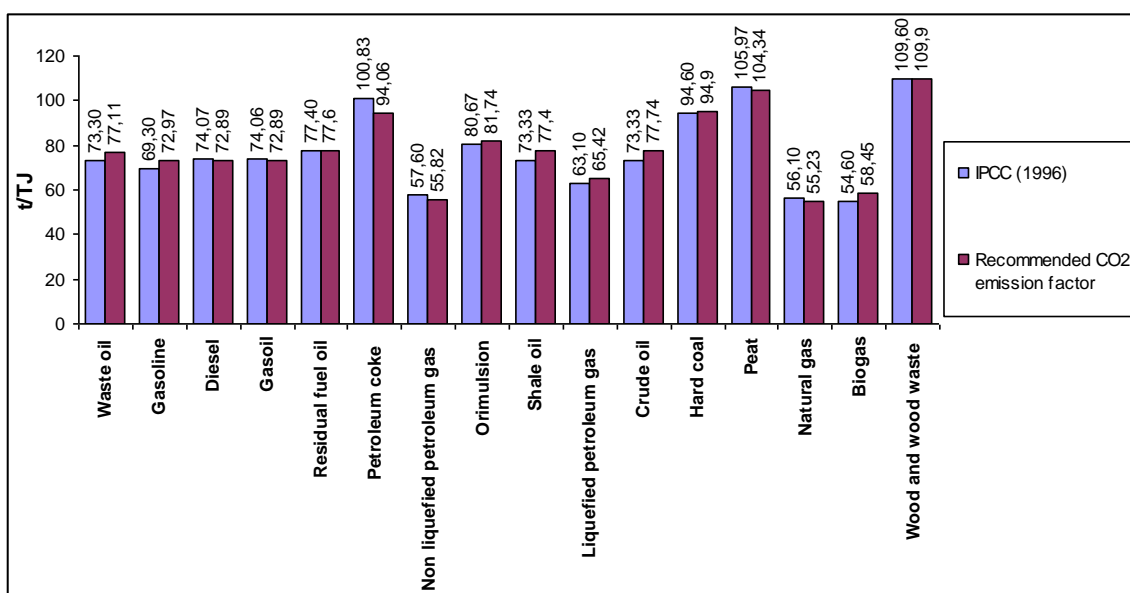


Figure 4-1. Comparison of recommended national CO₂ emission factors and default IPCC (1996) emission factors: energy industries

As it is seen from Figure 4-1, recommended values of national CO₂ emission factors are higher than default IPCC (1996) for many types of fuels. Recommended values of national CO₂ emission factors for diesel, gasoil, petroleum coke, non liquefied petroleum gas, peat and natural gas are lower than default IPCC (1996) values. Recommended national CO₂ emission factors of petroleum coke and non liquefied petroleum gas are lower than default values by 6,71% and 3,09%, respectively.

CO₂ emission factors for manufacturing industries and construction are recommended the same as for energy industries sector (Table 4-2). CH₄ and N₂O emission factors are selected considering to the results of analysis performed and default IPCC (1996) values.

Table 4-2. Recommended GHG emission factors for manufacturing industries and construction

1.AA.2 Manufacturing industries and construction	CO₂, t/TJ	CH₄, t/TJ	N₂O, t/TJ
Gasoil	72,89	0,002	0,0006
Residual fuel oil	77,60	0,002	0,0006
Petroleum coke	94,06	0,002	0,0006
Shale oil	77,40	0,002	0,0006
Liquefied petroleum gas	65,42	0,002	0,0006
Jet kerosene	72,24	0,002	0,0006
Coking coal	94,90	0,01	0,0015
Peat	104,34	0,002	0,0015
Coke	109,11	0,01	0,0015
Natural gas	55,23	0,005	0,0001
Biogas	58,45	0,001	0,0001
Wood and wood waste	109,9	0,03	0,004

Recommended values of CO₂, CH₄ and N₂O emission factors for transport sector are presented in Table 4-3. CO₂ emission factors of fuels (except aviation gasoline) used in transport sector are determined on the basis of measurement performed by accredited Laboratory of Quality Research Centre of JSC „ORLEN Lietuva“. Aviation gasoline is not produced in Lithuania. Minor volume of this fuel is imported from Sweden and other EU countries, therefore it is

recommended for aviation gasoline to apply average value of emission factors applied in EU countries.

Table 4-3. Recommended GHG emission factors for transport sector

1.AA.3 Transport	CO ₂ , t/TJ	CH ₄ , t/TJ	N ₂ O, t/TJ
Aviation gasoline	71,62	0,0005	0,002
Gasoline	72,97	0,02	0,0006
Diesel	72,89	0,005	0,0006
Residual fuel oil	77,60	0,005	0,0006
Liquefied petroleum gas	65,42	0,005	0,0006
Jet kerosene	72,24	0,0005	0,002

The comparison of recommended national CO₂ emission factors with default IPCC (1996) emission factors are presented in Figure 4-2.

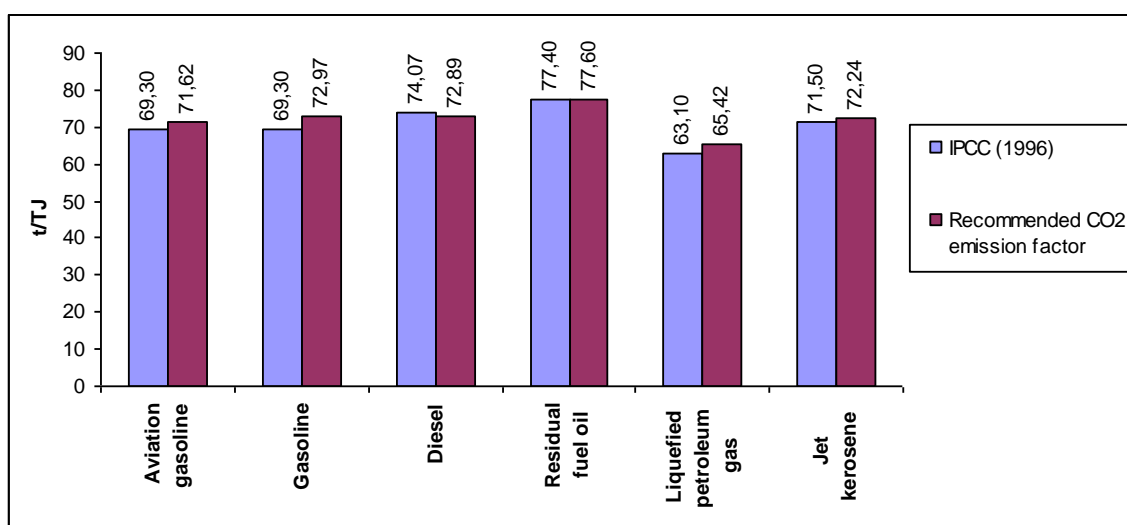


Figure 4-2. Comparison of recommended national CO₂ emission factors with default IPCC (1996) emission factors: transport sector

As it is seen from Figure 4-2, only in the case of diesel, recommended value of national CO₂ emission factor is lower than the default value (by 1,59%). In all other cases, recommended values of national CO₂ emission factors exceed default IPCC (1996) values by 0,26% (residual fuel oil) – 5,30% (gasoline).

Recommended values of CO₂, CH₄ and N₂O emission factors for service, household, agriculture and fishing sector are presented in Table 4-4.

Table 4-4. Recommended GHG emission factors for commercial/institutional, household, agriculture and fishing sectors

1.AA.3 Other sectors	Fuel type	CO ₂ , t/TJ	CH ₄ , t/TJ	N ₂ O, t/TJ
Commercial/ institutional sector	Coking coal	94,9	0,01	0,0014
	Biogas	58,45	0,005	0,0001
	Peat	104,34	0,01	0,0014
	Natural gas	55,23	0,005	0,0001
	Gasoil	72,89	0,01	0,0006
	Lignite	101,2	0,01	0,0014
	Wood and wood waste	109,9	0,3	0,004
	Residual fuel oil	77,6	0,01	0,0006
	Charcoal	109,9	0,2	0,001
	Shale oil	77,4	0,01	0,0006
Household sector	Liquefied petroleum gas	65,42	0,01	0,0006
	Coking coal	94,9	0,3	0,0014
	Peat	104,34	0,3	0,0014
	Natural gas	55,23	0,005	0,0001
	Gasoil	72,89	0,01	0,0006
	Lignite	101,2	0,3	0,0014
	Wood and wood waste	109,9	0,3	0,004
	Residual fuel oil	77,6	0,01	0,0006
Agriculture and fishing sector	Liquefied petroleum gas	65,42	0,01	0,0006
	Coking coal	94,9	0,3	0,0014
	Biogas	58,45	0,005	0,0001
	Peat	104,34	0,3	0,0014
	Natural gas	55,23	0,005	0,0001
	Gasoil	72,89	0,01	0,0006
	Wood and wood waste	109,9	0,3	0,004
	Residual fuel oil	77,6	0,01	0,0006
	Shale oil	77,4	0,01	0,0006
Liquefied petroleum gas	65,42	0,01	0,0006	

Recommended CO₂ emission factors for the main types of fuel are the same as for energy industries sector. Only in the case of lignite it is recommended to apply the default IPCC (1996) value.

Preparing the national GHG inventory, it is essential to evaluate the overall inventory uncertainty. For this purpose it is needed to have uncertainty estimates of emission factors, therefore in this study expert valuations of determined national emission factors uncertainties are performed.

Considering to international practice, uncertainty assessment of CO₂, N₂O and CH₄ emission factors is performed at aggregated sector-specific and fuel type-specific (liquid, solid, gaseous fuel and biomass) levels. Uncertainty estimations of recommended GHG emission factors are presented in Table 4-5.

Table 5. Uncertainties of recommended GHG emission factors

<i>IPCC source category</i>	<i>Fuel type</i>	<i>CO₂</i>	<i>CH₄</i>	<i>N₂O</i>
1.A.1 Energy industries	Liquid fuel	± 2,5%	± 50%	± 50%
	Solid fuel	± 7%	± 50%	± 50%
	Natural gas	± 2,5%	± 50%	± 50%
	Biomass	± 50%	± 150%	± 150%
1.A.2 Manufacturing industry and construction	Liquid fuel	± 2,5%	± 50%	± 50%
	Solid fuel	± 7%	± 50%	± 50%
	Natural gas	± 2,5%	± 50%	± 50%
	Biomass	± 50%	± 150%	± 150%
1.A.3 Transport	Liquid fuel	± 2,5%	± 100%	± 150%
1.A.4 Other sectors: commercial/institutional, household, agriculture and fishing	Liquid fuel	± 2,5%	± 50%	± 50%
	Solid fuel	± 7%	± 50%	± 50%
	Natural gas	± 2,5%	± 50%	± 50%
	Biomass	± 50%	± 150%	± 150%

Assessment of uncertainty of CO₂ emission factors is performed considering to the fact that carbon share of some types of fuels is relatively stable (for example, in the case of natural gas). Therefore uncertainties of CO₂ emission factors of these type of fuels are fairly small (±2,5%). Emission factors for liquid fuels mainly are identified at the accredited laboratory that satisfies the requirements of LST EN ISO/IEC 17025:2005 standard or are based on data provided by EU ETS applying the Tier 3. This has an influence on low uncertainties of emission factors for liquid fuel (±2,5%). Uncertainties of emission factors for solid fuel are remarkably higher, because, for example, carbon share in peat is variable, therefore uncertainties of emission factors for solid fuels are estimated considering to the recommendations provided in IPCC methodology. Uncertainty of CO₂ emission factor for biomass is the highest and reaches ±50%.

Uncertainties of aggregated CH₄ and N₂O emission factors are very high, since these emission factors highly depend on type of combustion technologies. Assessment of uncertainties of these emission factors are performed considering to IPCC Guidelines for National GHG inventories (2006).

ANNEX V. CO₂ emissions from the installations registered in the GHG Emission Allowance Registry, 2014

Table 5-1. CO₂ emissions from the installations registered in the GHG Emission Allowance Registry, 2014

No	Company	Name of the installation	EUA Allocations	Verified emissions, t CO ₂	Corresponding CRF Sector (Fuel combustion)
1.	AB Akmenės cementas	Boiler house, cement production furnace	637652	806637	1.A.2.F Non-Metallic Minerals
2.	AB Naujasis kalcitas	Whitewash production furnace	46153	49527	1.A.2.F Non-Metallic Minerals
3.	UAB Švenčionių keramika	Furnace for ceramics	5482	1177	1.A.2.F Non-Metallic Minerals
4.	UAB Rokų keramika	Ceramics combustion furnace	8331	1796	1.A.2.F Non-Metallic Minerals
5.	AB Palemono keramika	Ceramics combustion furnace	8440	3124	1.A.2.F Non-Metallic Minerals
6.	AB Dvarčionių keramika	Ceramics combustion furnace	12053	106	1.A.2.F Non-Metallic Minerals
7.	AB Alytaus keramika	Ceramics combustion furnace	1559	291	1.A.2.F Non-Metallic Minerals
8.	UAB Kauno stiklas	Glass melting furnace	5805	14255	1.A.2.F Non-Metallic Minerals
9.	AB Kar Glass Lietuva	Glass melting furnace	11251	22884	1.A.2.F Non-Metallic Minerals
10.	AB ORLEN Lietuva	Oil refining factory	1410726	1631285	1.A.1.B Petroleum Refining / 1.A.1.A Public electricity and heat production
11.	AB Klaipėdos kartonas	Boiler house	24672	15076	1.A.2. D Pulp, Paper and Print
12.	AB Grigiškės	Boiler house	38074	175	1.A.2. D Pulp, Paper and Print
13.	AB Simega	Boiler house	4003	0	1.A.2.J Wood and Wood Products
14.	AB Achema	Boiler house	2066309	2716077	1.A.2.C Chemicals / 1.A.1.A Public electricity and heat production
15.	AB Nordic Sugar Kėdainiai	Boiler house, oilcake desiccation	29533	30196	1.A.2.E Food processing, Beverages and Tobacco
16.	AB Anykščių vynas	Boiler house	0	439	1.A.2.E Food processing, Beverages and Tobacco
17.	AB Lifosa	Boiler house	175295	326	1.A.2.C Chemicals
18.	AB Klaipėdos nafta	Boiler house	19123	16582	1.A.1.A Public electricity and heat production
19.	UAB ARVI cukrus	Boiler house	13095	18443	1.A.2.E Food processing, Beverages and Tobacco
20.	AB Įmonių grupė "Alita"	Boiler house, desiccation of apple oilcake	1080	1394	1.A.2.E Food processing, Beverages and Tobacco
21.	UAB Idavag Pasodėlė	Boiler house	1879	0	1.A.4.C Agriculture/ Forestry/ Fisheries
22.	AB Klaipėdos mediena	Boiler house	15057	4554	1.A.2.J Wood and Wood Products
23.	UAB Matuizų plytinė	Boiler house	6539	0	1.A.1.A Public electricity and heat production
24.	AB Jonavos šilumos tinklai	Jonava boiler house	22814	7898	1.A.1.A Public electricity and heat production
25.	AB Jonavos šilumos tinklai	Girele boiler house	5362	63	1.A.1.A Public electricity and heat production
26.	UAB Mažeikių šilumos tinklai	Mazeikiai boiler house	24261	1075	1.A.1.A Public electricity and heat production

No	Company	Name of the installation	EUA Allocations	Verified emissions, t CO ₂	Corresponding CRF Sector (Fuel combustion)
27.	UAB Raseinių šilumos tinklai	Raseiniai boiler house No 4	6129	1732	1.A.1.A Public electricity and heat production
28.	UAB Molėtų šiluma	Moletai boiler house	4234	40	1.A.1.A Public electricity and heat production
29.	UAB Šilutės šilumos tinklai	Šilute boiler house	11640	14	1.A.1.A Public electricity and heat production
30.	UAB Vilniaus energija	Vilnius power plant No 2 (E-2)	310808	257041	1.A.1.A Public electricity and heat production
31.	UAB Vilniaus energija	Vilnius power plant No 3 (E-3)	173281	207438	1.A.1.A Public electricity and heat production
32.	UAB Vilniaus energija	Vilnius boiler house No 2	13438	5820	1.A.1.A Public electricity and heat production
33.	UAB Vilniaus energija	Vilnius boiler house No 8	1021	4312	1.A.1.A Public electricity and heat production
34.	UAB Širvintų šiluma	Širvintu boiler house No 3	4594	42	1.A.1.A Public electricity and heat production
35.	AB Šiaulių energija	Šiauliai southern boiler house	78368	34238	1.A.1.A Public electricity and heat production
36.	AB Klaipėdos energija	Power plant	59060	26749	1.A.1.A Public electricity and heat production
37.	UAB Radviliškio šiluma	Radviliškis city boiler house	9517	1197	1.A.1.A Public electricity and heat production
38.	UAB Utenos šilumos tinklai	Utena boiler house	28097	3605	1.A.1.A Public electricity and heat production
39.	UAB Tauragės šilumos tinklai	Taurage - Berže boiler house	9260	482	1.A.1.A Public electricity and heat production
40.	UAB Šalčininkų šilumos tinklai	Šalčininkai boiler house	3945	3277	1.A.1.A Public electricity and heat production
41.	VI Pravieniškųjų 2-ieji pataisos namai	Katiline	2956	3904	1.A.1.A Public electricity and heat production
42.	UAB Varėnos šiluma	Varena boiler house	7832	0	1.A.1.A Public electricity and heat production
43.	AB Panevėžio energija	Panevėžys boiler house No 2	32779	10633	1.A.1.A Public electricity and heat production
44.	AB Panevėžio energija	Rokiškis region boiler house	18575	2280	1.A.1.A Public electricity and heat production
45.	AB Panevėžio energija	Panevėžys region boiler house No 1	36675	29391	1.A.1.A Public electricity and heat production
46.	AB Panevėžio energija	Pasvalys region boiler house	5495	891	1.A.1.A Public electricity and heat production
47.	AB Panevėžio energija	Zarasai boiler house No 4	5048	275	1.A.1.A Public electricity and heat production
48.	UAB Geoterma	Klaipėda geothermal PP	21752	8074	1.A.1.A Public electricity and heat production
49.	AB Kauno energija	Petrašiunai PP	5457	10810	1.A.1.A Public electricity and heat production
50.	AB Kauno energija	Pergale boiler house	1183	10285	1.A.1.A Public electricity and heat production
51.	AB Kauno energija	Šilkas boiler house	2308	3297	1.A.1.A Public electricity and heat production
52.	AB Kauno energija	Noreikiškes region boiler house	4305	953	1.A.1.A Public electricity and heat production
53.	AB Kauno energija	Garliava region boiler house	4899	299	1.A.1.A Public electricity and heat production
54.	AB Kauno energija	Jurbarkas region boiler house	8035	7067	1.A.1.A Public electricity and heat production
55.	UAB Plungės šilumos tinklai	Plunge boiler house No 1	9108	414	1.A.1.A Public electricity and heat production
56.	UAB Birštono šiluma	Birštonas region boiler house	3429	826	1.A.1.A Public electricity and heat production

No	Company	Name of the installation	EUA Allocations	Verified emissions, t CO ₂	Corresponding CRF Sector (Fuel combustion)
57.	UAB Litesko filialas "Druskininkų šiluma"	Druskininkai industry boiler house	20495	10291	1.A.1.A Public electricity and heat production
58.	UAB Litesko filialas "Biržų šiluma"	Boiler house of Biržai city hall	2056	1229	1.A.1.A Public electricity and heat production
59.	UAB Litesko filialas "Vilkaviškio šiluma"	Vilkaviškis boiler house	5402	3277	1.A.1.A Public electricity and heat production
60.	UAB Litesko filialas "Telšų šiluma"	Luoke boiler house	8456	5061	1.A.1.A Public electricity and heat production
61.	UAB Litesko filialas "Kelmės šiluma"	Mackevicius boiler house	3876	454	1.A.1.A Public electricity and heat production
62.	UAB Litesko filialas "Palangos šiluma"	Palanga boiler house	13266	5658	1.A.1.A Public electricity and heat production
63.	UAB Litesko filialas "Marijampolės šiluma"	Kazlu Ruda boiler house	3209	613	1.A.1.A Public electricity and heat production
64.	UAB Litesko filialas "Marijampolės šiluma"	Marijampole region boiler house	29403	15818	1.A.1.A Public electricity and heat production
65.	UAB Litesko filialas "Alytaus energija"	Alytus region boiler house	53954	9995	1.A.1.A Public electricity and heat production
66.	AB Lietuvos elektrinė	Lietuvos PP	290837	400596	1.A.1.A Public electricity and heat production
67.	UAB Kauno termofikacijos elektrinė	Kaunas PP	256394	199758	1.A.1.A Public electricity and heat production
68.	UAB Kaišiadorių šiluma	Kaišiadoriai boiler house	6355	55	1.A.1.A Public electricity and heat production
69.	UAB Kretingos šilumos tinklai	Kretinga boiler house No 2	5883	0	1.A.1.A Public electricity and heat production
70.	AB Klaipėdos energija	Klaipėda region boiler house	51693	17047	1.A.1.A Public electricity and heat production
71.	AB Klaipėdos energija	Lypkiai regiopn boiler house	29554	11518	1.A.1.A Public electricity and heat production
72.	AB Pagirių šiltnamiai	Boiler house	13340	0	1.A.1.A Public electricity and heat production
73.	UAB Pramonės energija	CHP-1	14739	0	1.A.1.A Public electricity and heat production
74.	VI Ignalinos atominė elektrinė	Boiler house	6243	5017	1.A.1.A Public electricity and heat production
75.	UAB Prienų energija	Lentvaris boiler house	2299	214	1.A.1.A Public electricity and heat production
76.	UAB Gargždų plytų gamykla	Boiler house	2400	0	1.A.2.F Non-Metallic Minerals
77.	UAB Akmenės energija	Zalgiris boiler house	5619	1446	1.A.1.A Public electricity and heat production
78.	AB Panevėžio energija	Panevėžys thermal PP	28614	35991	1.A.1.A Public electricity and heat production
79.	UAB IKEA Industry Lietuva	Fuel combustion plants	40520	10484	1.A.2.J Wood and wood products
80.	UAB NEO GROUP	Boiler house	35205	39122	1.A.2.C Chemicals
81.	AB Panevėžio energija	Kėdainiai region boiler house	107	428	1.A.1.A Public electricity and heat production
82.	UAB Paroc	Plants producing stone-wool	34759	56553	1.A.2.F Non-Metallic Minerals
83.	AB Vilniaus gelžbetoninių konstrukcijų gamykla Nr. 3	Boiler house	1034	334	1.A.2.F Non-Metallic Minerals
84.	UAB Vilniaus energija	Region boiler house No 7	1	61	1.A.1.A Public electricity and heat production
85.	UAB Agro Neveronys	Boiler house	5499	0	1.A.4.C Agriculture/ Forestry/ Fisheries
86.	UAB Pramonės energija	Boiler house	15726	356	1.A.1.A Public electricity and heat production

No	Company	Name of the installation	EUA Allocations	Verified emissions, t CO ₂	Corresponding CRF Sector (Fuel combustion)
87.	VĮ "Visagino energija"	Thermal boiler house	66727	35565	1.A.1.A Public electricity and heat production
88.	AB Amilina	Boiler house and driers	28554	6741	1.A.2.E Food processing, Beverages and Tobacco
89.	UAB Lignoterma	Boiler house	673	15	1.A.1.A Public electricity and heat production
90.	AB Amber Grid	Jauniūnų gas compressor station	0	580	1.A.1.A Public electricity and heat production
91.	UAB Hoegh LNG Klaipėda	LNG ship	0	11191	1.A.1.A Public electricity and heat production
		Total:	6560668	6864234	

ANNEX VI. LULUCF area matrices, resulted from studies presented in Chapter 6.1.1

1990

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,054,182	399	3,994	2,396	399	0	2,061,370	7,188
Cropland	0	2,403,666	22,367	0	0	0	2,426,033	-39,541
Grassland	0	61,110	1246568	0	0	0	1,307,678	42,339
Wetlands	0	0	0	363066	0	0	363,066	-5,193
Settlements	0	0	0	0	324323	0	324,323	1,198
Other land	0	0	0	0	0	47530	47,530	-5,991
Initial	2,054,182	2,465,574	1,265,339	368,259	323,125	53,521	6,530,000	0

1991

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,061,370	399	3,994	2,396	399	0	2,068,559	7,189
Cropland	0	2,362,926	22,367	0	799	399	2,386,492	-39,541
Grassland	0	61,110	1,279,719	3,595	799	4,793	1,350,015	42,337
Wetlands	0	399	399	357,075	0	0	357,874	-5,192
Settlements	0	1,198	1,198	0	322,326	799	325,521	1,198
Other land	0	0	0	0	0	41,539	41,539	-5,991
Initial	2,061,370	2,426,033	1,307,678	363,066	324,323	47,530	6,530,000	0

1992

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,068,559	399	3,195	1,997	0	399	2,074,550	5,991
Cropland	0	2320,189	25,562	0	0	799	2,346,550	-39,942
Grassland	0	62,308	1,320,858	2,396	1,598	4,793	1,391,954	41,939
Wetlands	0	399	0	353,480	0	2,396	356,276	-1,598
Settlements	0	2,396	399	0	323,924	399	327,119	1,598
Other land	0	799	0	0	0	32,752	33,551	-7,988
Initial	2,068,559	2386492	1,350,015	357,874	325,521	41,539	6,530,000	0

1993

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,074,550	1,198	3,994	0	0	0	2,079,742	5,192
Cropland	0	2,283,842	23,565	1,198	799	1,598	2,311,003	-35,547
Grassland	0	59,513	1,363,595	1,598	1,598	5,192	1,431,496	39,542
Wetlands	0	399	399	353,480	0	399	354,679	-1,597
Settlements	0	799	399	0	324,723	0	325,921	-1,198
Other land	0	799	0	0	0	26,361	27,160	-6,391
Initial	2,074,550	2,346,550	1,391,954	356,276	327,119	33,551	6,530,000	0

1994

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,079,343	0	2,396	399	399	0	2,082,538	2,796
Cropland	0	2,239,508	29,157	0	0	799	2,269,464	-41,539
Grassland	0	67,501	1,398,344	799	799	5,592	1,473,034	41,538
Wetlands	0	799	0	353,480	0	399	354,679	0
Settlements	0	2,796	1,598	0	324,723	0	329,116	3,195
Other land	399	399	0	0	0	20,370	21,169	-5,991
Initial	2,079,742	2,311,003	1,431,496	354,679	325,921	27,160	6,530,000	0

1995

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,082,538	0	1,598	799	0	0	2,084,935	2,397
Cropland	0	2,206,756	25,962	0	0	399	2,233,117	-36,347
Grassland	0	59,513	1,444,277	2,396	2,796	4,394	1,513,375	40,341
Wetlands	0	799	1,198	351,483	0	1,198	354,679	0
Settlements	0	1,997	0	0	326,320	399	328,717	-399
Other land	0	399	0	0	0	14,778	15,178	-5,991
Initial	2,082,538	2,269,464	1,473,034	354,679	329,116	21,169	6,530,000	0

1996

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,084,935	399	3,195	1,598	0	0	2,090,127	5,192
Cropland	0	2,207,555	8,388	0	0	0	2,215,942	-17,175
Grassland	0	25,163	1,501,792	399	0	0	1,527,355	13,980
Wetlands	0	0	0	352,682	0	0	352,682	-1,997
Settlements	0	0	0	0	328,717	0	328,717	0
Other land	0	0	0	0	0	15,178	15,178	0
Initial	2,084,935	2,233,117	1,513,375	354,679	328,717	15,178	6,530,000	0

1997

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,090,127	799	2,396	399	0	0	2,093,722	3,595
Cropland	0	2,163,619	19,571	0	0	399	2,183,590	-32,352
Grassland	0	51,125	1,504,588	0	0	0	1,555,713	28,358
Wetlands	0	0	399	352,282	0	0	352,682	0
Settlements	0	399	399	0	328,317	0	329,116	399
Other land	0	0	0	0	399	14,778	15,178	0
Initial	2,090,127	2,215,942	1,527,355	352,682	328,717	15,178	6,530,000	0

1998

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,093,722	0	3,195	0	0	399	2,097,317	3,595
Cropland	0	2,096,518	37,944	0	0	0	2,134,462	-49,128
Grassland	0	86,273	1,514,174	0	0	0	1,600,447	44,734
Wetlands	0	0	0	352,282	0	0	352,282	-400
Settlements	0	399	399	399	32,9116	0	330,314	1,198
Other land	0	399	0	0	0	14,778	15,178	0
Initial	2,093,722	2,183,590	1,555,713	352,682	32,9116	15,178	6,530,000	0

1999

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,096,917	399	1,598	1,198	0	0	2,100,113	2,796
Cropland	0	2,036,606	51,924	0	0	0	2,088,530	-45,932
Grassland	0	97,057	1,546,127	0	0	0	1,643,184	42,737
Wetlands	399	0	0	351,084	0	0	351,483	-799
Settlements	0	399	799	0	330,314	0	331,513	1,199
Other land	0	0	0	0	0	15,178	15,178	0
Initial	2,097,317	2,134,462	1,600,447	352,282	330,314	15,178	6,530,000	0

2000

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,100,113	399	2,396	2,396	0	399	2,105,704	5,591
Cropland	0	1,978,292	51,125	0	0	0	2,029,416	-59,114
Grassland	0	107,841	1,588,465	399	399	0	1,697,105	53,921
Wetlands	0	0	0	348,687	0	0	348,687	-2,796
Settlements	0	1,997	1,198	0	331,113	0	334,309	2,796
Other land	0	0	0	0	0	14,778	14,778	-400
Initial	2,100,113	2,088,530	1,643,184	351,483	331,513	15,178	6,530,000	0

2001

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,105,704	799	2,396	0	0	0	2,108,900	3,196
Cropland	0	1,925,170	42,338	0	0	0	1,967,507	-61,909
Grassland	0	103,049	1,651,572	399	399	399	1,755,819	58,714
Wetlands	0	0	0	348,288	0	0	348,288	-399
Settlements	0	399	399	0	333,909	399	335,107	798
Other land	0	0	399	0	0	13,979	14,379	-399
Initial	2,105,704	2,029,416	1,697,105	348,687	334,309	14,778	6,530,000	0

2002

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,108,900	0	3,994	399	0	0	2,113,293	4,393
Cropland	0	1,878,438	40,341	0	0	0	1,918,779	-48,728
Grassland	0	8,8270	1,711,084	0	0	0	1,799,355	43,536
Wetlands	0	0	399	347,889	0	799	349,087	799
Settlements	0	799	0	0	335,107	0	335,906	799
Other land	0	0	0	0	0	13,580	13,580	-799
Initial	2,108,900	1,967,507	1,755,819	348,288	335,107	14,379	6,530,000	0

2003

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,112,894	799	3,595	1,198	399	0	2,118,885	5,592
Cropland	0	1,853,275	23,565	0	0	0	1,876,841	-41,938
Grassland	0	64,705	1,771,396	0	0	399	1,836,500	37,145
Wetlands	399	0	0	347,889	0	0	348,288	-799
Settlements	0	0	399	0	335,507	0	335,906	0
Other land	0	0	399	0	0	13,181	13,580	0
Initial	2,113,293	1,918,779	1,799,355	349,087	335,906	13,580	6,530,000	0

2004

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2118486	399	6391	1598	0	0	2126873	7988
Cropland	0	1825716	29157	0	0	0	1854873	-21968
Grassland	0	50326	1800154	399	0	0	1850879	14379
Wetlands	399	0	799	346291	0	399	347889	-399
Settlements	0	399	0	0	335906	0	336306	400
Other land	0	0	0	0	0	13181	13181	-399
Initial	2118885	1876841	1836500	348288	335906	13580	6530000	0

2005

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,126,474	799	5,592	1,598	0	399	2,134,861	7,988
Cropland	0	1,815,331	19,971	0	0	0	1,835,302	-19,571
Grassland	0	37,545	1,824,917	0	0	0	1,862,462	11,583
Wetlands	0	0	399	346,291	0	399	347,090	-799
Settlements	399	1,198	0	0	336,306	0	337,903	1,597
Other land	0	0	0	0	0	12,382	12,382	-799
Initial	2,126,873	1,854,873	1,850,879	347,889	336,306	13,181	6,530,000	0

2006

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,134,063	799	5,592	1,598	0	0	2,142,051	7,190
Cropland	0	1,802,949	90,267	0	0	0	1,893,217	57,915
Grassland	0	31,154	1,764,206	799	0	0	1,796,159	-66,303
Wetlands	0	399	399	344,693	0	0	345,492	-1,598
Settlements	399	0	1,598	0	337,903	0	339,900	1,997
Other land	399	0	399	0	0	12,382	13,181	799
Initial	2,134,861	1,835,302	1,862,462	347,090	337,903	12,382	6,530,000	0

2007

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,142,051	2,796	3,195	1,997	0	399	2,150,439	8,388
Cropland	0	1,866,057	86,673	0	0	0	1,952,729	59,512
Grassland	0	24,364	1,705,093	0	0	0	1,729,457	-66,702
Wetlands	0	0	399	343,495	0	0	343,894	-1,598
Settlements	0	0	799	0	339,900	0	340,699	799
Other land	0	0	0	0	0	12,781	12,781	-400
Initial	2,142,051	1,893,217	1,796,159	345,492	339,900	13,181	6,530,000	0

2008

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2150439	1598	4793	399	0	0	2,157,229	6,790
Cropland	0	1925969	100253	0	399	0	2,026,621	73,892
Grassland	0	24764	1622015	399	0	0	1,647,178	-82,279
Wetlands	0	0	799	343096	0	0	343,894	0
Settlements	0	399	799	0	340300	0	341,498	799
Other land	0	0	799	0	0	12781	13,580	799
Initial	2150439	1952729	1729457	343894	340699	12781	6,530,000	0

2009

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,156,829	0	3,195	0	0	0	2,160,024	2,795
Cropland	0	2,009,046	71,495	0	0	0	2,080,541	53,920
Grassland	0	17,175	1,570,891	0	799	399	1,589,264	-57,914
Wetlands	399	0	399	343,894	0	0	344,693	799
Settlements	0	399	799	0	340,699	0	341,897	399
Other land	0	0	399	0	0	13,181	13,580	0
Initial	2,157,229	2,026,621	1,647,178	343,894	341,498	13,580	6,530,000	0

2010

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,160,024	399	5,592	399	0	0	2,166,415	6,391
Cropland	0	2,078,944	5,991	0	0	0	2,084,935	4,394
Grassland	0	1,198	1,577,681	799	0	0	1,579,678	-9,586
Wetlands	0	0	0	343,495	0	0	343,495	-1,198
Settlements	0	0	0	0	341,897	0	341,897	0
Other land	0	0	0	0	0	13,580	13,580	0
Initial	2,160,024	2,080,541	1,589,264	344,693	341,897	13,580	6,530,000	0

2011

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,166,415	1,997	4,793	0	0	0	2,173,205	6,790
Cropland	0	2,076,547	13,979	0	0	0	2,090,527	5,592
Grassland	0	6,391	1,560,905	399	0	0	1,567,695	-11,983
Wetlands	0	0	0	343,096	0	0	343,096	-399
Settlements	0	0	0	0	341,897	0	341,897	0
Other land	0	0	0	0	0	13,580	13,580	0
Initial	2,166,415	2,084,935	1,579,678	343,495	341,897	13,580	6,530,000	0

2012

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,173,205	1,997	8,787	799	0	0	2,184,788	11,583
Cropland	0	2,083,337	30,355	0	0	0	2,104,107	23,166
Grassland	0	5,192	1,527,355	0	0	0	1,542,133	-35,148
Wetlands	0	0	0	342,297	0	0	342,297	-799
Settlements	0	0	799	0	341,897	0	342,696	799
Other land	0	0	399	0	0	13,580	13,979	399
Initial	2,173,205	2,090,527	1,567,695	343,096	341,897	13,580	6,530,000	0

2013

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	218,4788	799	3,595	0	0	0	2,189,182	4,394
Cropland	0	2,073,352	57,915	0	0	0	2,131,267	17,574
Grassland	0	39,142	1,467,043	399	399	0	1,506,985	-25,562
Wetlands	0	0	399	341,897	0	0	342,297	0
Settlements	0	399	3,595	0	342,297	0	346,291	3,595
Other land	0	0	0	0	0	13,979	13,979	0
Initial	2,184,788	2,113,693	1,532,547	342,297	342,696	13,979	6,530,000	0

2014

Land category	Forest land	Cropland	Grassland	Wetlands	Settlements	Other land	Final	Net change
Forest land	2,189,182	1,997	3,595	2,396	0	0	2,197,170	7,988
Cropland	0	2,075,349	79,483	0	0	0	2,154,832	23,565
Grassland	0	52,723	1,415,918	1,198	399	799	1,471,037	-35,948
Wetlands	0	0	2,796	338,702	0	399	341,897	-399
Settlements	0	1,198	4,794	0	345,891	0	351,883	5,593
Other land	0	0	399	0	0	12,782	13,185	-799
Initial	2,189,182	2,131,267	1,506,985	342,296	346,290	13,980	6,530,000	0

ANNEX VII. Recalculations made in Agriculture sector

Table A. 5-1. Changes in dairy cattle population, milk yield, gross energy, methane emission factor per cow and methane emission in the period of 1990-2014, per cent (1990=100%)

Year	Population of dairy cattle	Milk production	Gross energy	Emission Factor	Emission
1990	100	100	100	100	100
1991	99	93	97	97	96
1992	88	82	93	93	81
1993	81	78	91	91	73
1994	73	78	91	91	66
1995	70	81	92	92	64
1996	70	83	93	93	65
1997	69	86	94	94	65
1998	64	91	96	96	61
1999	59	87	94	94	55
2000	52	99	99	99	52
2001	52	104	102	102	53
2002	53	107	103	103	54
2003	53	108	103	103	55
2004	52	112	105	105	54
2005	49	116	106	106	53
2006	47	120	109	108	51
2007	48	127	112	111	53
2008	47	129	113	112	53
2009	44	130	113	113	50
2010	43	133	114	114	49
2011	42	136	116	115	48
2012	39	142	119	118	46
2013	37	145	120	119	45
2014	37	154	125	124	46

Table A. 5-2. Reported in previous submission and recalculated methane emission factor (kg CH₄/head/year) and methane emission (kt) from manure management for dairy cattle

Year	2015 submission		2016 submission		Relative difference, %	
	CH ₄ EF (kg CH ₄ /head/year)	CH ₄ emission (kt)	CH ₄ EF (kg CH ₄ /head/year)	CH ₄ emission (kt)	CH ₄ EF	CH ₄ emission
1990	6.08	5.12	5.98	5.03	-1.6	-1.8
1991	6.01	5.00	5.87	4.88	-2.3	-2.4
1992	5.82	4.29	5.67	4.19	-2.6	-2.3
1993	5.79	3.93	5.62	3.81	-2.9	-3.1
1994	5.86	3.60	5.70	3.51	-2.7	-2.5
1995	5.99	3.51	5.83	3.42	-2.7	-2.6
1996	6.12	3.61	5.94	3.51	-2.9	-2.8
1997	6.27	3.65	6.10	3.55	-2.7	-2.7
1998	6.46	3.47	6.30	3.39	-2.5	-2.3
1999	6.43	3.18	6.26	3.09	-2.6	-2.8
2000	6.81	2.98	6.66	2.92	-2.2	-2.0
2001	7.03	3.10	6.90	3.05	-1.8	-1.6
2002	7.14	3.17	7.04	3.12	-1.4	-1.6
2003	7.26	3.25	7.14	3.20	-1.7	-1.5
2004	7.47	3.24	7.36	3.19	-1.5	-1.5
2005	7.63	3.18	7.53	3.14	-1.3	-1.3
2006	7.84	3.13	7.76	3.09	-1.0	-1.3
2007	8.12	3.29	8.06	3.26	-0.7	-0.9
2008	8.26	3.26	8.22	3.24	-0.5	-0.6
2009	8.39	3.14	8.33	3.12	-0.7	-0.6
2010	8.55	3.08	8.50	3.06	-0.6	-0.6
2011	8.74	3.06	8.70	3.04	-0.5	-0.7
2012	9.04	2.99	9.02	2.99	-0.2	0.0
2013	9.21	2.91	9.20	2.90	-0.1	-0.3

Table A. 5-3. Reported in previous submission and recalculated methane emission factor (kg CH₄/head/year) and methane emission (kt) from manure management for non-dairy cattle

Year	2015 submission		2016 submission		Relative difference, %	
	CH ₄ EF (kg CH ₄ /head/year)	CH ₄ emission (kt)	CH ₄ EF (kg CH ₄ /head/year)	CH ₄ emission (kt)	CH ₄ EF	CH ₄ emission
1990	3.43	5.08	3.29	4.86	-4.1	-4.3
1991	3.49	4.77	3.34	4.56	-4.3	-4.4
1992	3.55	3.42	3.40	3.28	-4.2	-4.1
1993	3.61	2.55	3.46	2.44	-4.2	-4.3
1994	3.67	1.97	3.52	1.89	-4.1	-4.1
1995	3.73	1.79	3.57	1.71	-4.3	-4.5
1996	3.79	1.76	3.63	1.68	-4.2	-4.5
1997	3.85	1.67	3.69	1.60	-4.2	-4.2
1998	3.57	1.39	3.60	1.41	0.8	1.4

Table A. 5-4. Reported in previous submission and recalculated methane emission factor (kg CH₄/head/year) and methane emission (kt) from manure management for swine

Year	2015 submission		2016 submission		Relative difference, %	
	CH ₄ EF (kg CH ₄ /head/year)	CH ₄ emission (kt)	CH ₄ EF (kg CH ₄ /head/year)	CH ₄ emission (kt)	CH ₄ EF	CH ₄ emission
1990	5.83	14.20	3.89	9.47	-33.3	-33.3
1991	5.85	12.76	3.90	8.50	-33.3	-33.3
1992	5.87	7.99	3.92	5.33	-33.3	-33.3
1993	5.90	7.05	3.93	4.70	-33.3	-33.3
1994	5.92	7.46	3.95	4.97	-33.3	-33.3
1995	5.94	7.54	3.96	5.03	-33.3	-33.3
1996	5.96	6.72	3.97	4.48	-33.3	-33.3
1997	6.04	7.24	4.02	4.83	-33.3	-33.3
1998	5.94	6.88	3.96	4.59	-33.3	-33.3
1999	6.05	5.67	4.04	3.78	-33.3	-33.3
2000	6.03	5.23	4.02	3.49	-33.3	-33.3
2001	6.07	6.14	4.05	4.09	-33.3	-33.3
2002	6.09	6.46	4.06	4.31	-33.3	-33.3
2003	6.10	6.45	4.07	4.30	-33.3	-33.3
2004	5.89	6.32	3.93	4.22	-33.3	-33.3
2005	5.88	6.55	3.92	4.37	-33.3	-33.3
2006	5.82	6.56	3.88	4.37	-33.3	-33.3
2007	5.82	5.38	3.88	3.58	-33.3	-33.3
2008	5.92	5.32	3.95	3.54	-33.3	-33.3
2009	5.76	5.35	3.84	3.57	-33.3	-33.3
2010	5.97	5.55	3.98	3.70	-33.3	-33.3
2011	6.20	4.90	4.13	3.26	-33.3	-33.3
2012	6.31	5.09	4.21	3.40	-33.3	-33.3
2013	6.34	4.78	4.22	3.19	-33.3	-33.3

Table A. 5-5. Reported in previous submission and recalculated N excretion of cattle, kt

Year	2015 submission		2016 submission		Relative difference, %	
	Dairy cattle	Non-dairy cattle	Dairy cattle	Non-dairy cattle	Dairy cattle	Non-dairy cattle
1990	82.28	41.13	79.87	41.13	-2.9	0.0
1991	79.67	41.12	76.33	41.11	-4.2	0.0
1992	74.87	41.11	71.37	41.09	-4.7	0.0
1993	73.30	41.11	69.02	41.08	-5.8	-0.1
1994	73.22	41.10	69.44	41.07	-5.2	-0.1
1995	74.25	41.09	70.63	41.05	-4.9	-0.1
1996	75.30	41.08	71.29	41.03	-5.3	-0.1
1997	76.68	41.08	72.90	41.02	-4.9	-0.1
1998	78.67	38.22	75.20	38.16	-4.4	-0.2
1999	77.00	38.85	73.27	38.78	-4.8	-0.2
2000	82.04	38.17	79.04	38.09	-3.7	-0.2
2001	84.40	38.00	81.75	37.91	-3.1	-0.2
2002	84.90	38.09	82.98	38.00	-2.3	-0.2
2003	85.71	38.04	83.39	37.93	-2.7	-0.3
2004	87.75	37.65	85.88	37.53	-2.1	-0.3
2005	89.08	37.91	87.52	37.79	-1.8	-0.3
2006	91.10	38.75	89.98	38.61	-1.2	-0.4
2007	93.74	39.32	93.24	39.17	-0.5	-0.4
2008	94.34	39.38	94.58	39.22	0.3	-0.4
2009	95.13	39.67	94.95	39.50	-0.2	-0.4
2010	96.13	40.39	96.16	40.21	0.0	-0.4
2011	97.43	38.76	97.85	38.58	0.4	-0.5
2012	100.20	39.40	101.44	39.20	1.2	-0.5
2013	101.17	40.71	102.72	40.52	1.5	-0.5