

Annex A.1.1

OVERALL ENERGY BALANCE, 2005, High Indigenous Case

(In Million Barrels of Fuel Oil Equivalent, MMBFOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	5.03	11.30	9.94	59.43	14.25	0.46	47.34	0.34	-	148.10
Net Imports	104.95	-	26.91	-	-	-	-	1.24	-	133.10
Total Primary Supply	109.99	11.30	36.86	59.43	14.25	0.46	47.34	1.58	-	281.20
Share	39.11	4.02	13.11	21.13	5.07	0.16	16.83	0.56	-	100.00
Oil Refining	(5.69)	-	-	-	-	-	-	-	-	(5.69)
Transmission & Distribution	-	-	-	-	-	-	-	-	(3.37)	(3.37)
Electricity Generation	(14.48)	(11.04)	(29.80)	(59.43)	(14.25)	(0.35)	-	-	33.41	(95.94)
Total Transformation	(20.17)	(11.04)	(29.80)	(59.43)	(14.25)	(0.35)	-	-	30.04	(104.99)
Industrial	15.35	0.24	6.63	-	-	0.01	9.75	-	9.53	41.51
Commercial	4.47	-	-	-	-	0.01	1.46	-	9.29	15.23
Transport	56.47	0.02	-	-	-	-	-	1.58	0.04	58.11
Agriculture	2.54	-	-	-	-	0.04	-	-	0.00	2.58
Residential	7.17	-	-	-	-	0.04	36.14	-	11.18	54.53
Final Energy Demand	85.99	0.26	6.63	-	-	0.11	47.34	1.58	30.04	171.96
Savings from Energy Efficiency and Conservation										11.64
Final Energy Demand with Savings										160.32
Self-sufficiency, in percent										52.67

(In Thousand Tonnes of Oil Equivalent, KTOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	727.03	1,632.22	1,435.91	8,581.08	2,057.56	66.62	6,835.79	49.10	-	21,385.32
Net Imports	15,154.83	-	3,886.38	-	-	-	-	179.06	-	19,220.27
Total Primary Supply	15,881.87	1,632.22	5,322.29	8,581.08	2,057.56	66.62	6,835.79	228.15	-	40,605.59
Share	39.11	4.02	13.11	21.13	5.07	0.16	16.83	0.56	-	100.00
Oil Refining	(821.64)	-	-	-	-	-	-	-	-	(821.64)
Transmission & Distribution	-	-	-	-	-	-	-	-	(486.21)	(486.21)
Electricity Generation	(2,090.68)	(1,594.01)	(4,303.62)	(8,581.08)	(2,057.56)	(51.03)	-	-	4,824.26	(13,853.73)
Total Transformation	(2,912.32)	(1,594.01)	(4,303.62)	(8,581.08)	(2,057.56)	(51.03)	-	-	4,338.04	(15,161.58)
Industrial	2,208.04	0.03	1,054.40	-	-	0.71	1,407.32	-	1,376.19	6,046.70
Commercial	643.88	-	-	-	-	1.83	210.17	-	1,341.47	2,197.34
Transport	8,160.69	0.00	-	-	-	-	-	228.15	5.57	8,394.41
Agriculture	366.86	-	-	-	-	5.66	-	-	0.37	372.88
Residential	1,035.08	-	-	-	-	4.74	5,218.30	-	1,614.45	7,872.57
Final Energy Demand	12,414.54	0.04	1,054.40	-	-	12.93	6835.79	228.15	4,338.04	24,883.90
Savings from Energy Efficiency and Conservation										1,680.82
Final Energy Demand with Savings										23,203.08
Self-sufficiency, in percent										52.67

Annex A.1.1

OVERALL ENERGY BALANCE, 2006, High Indigenous Case

(In Million Barrels of Fuel Oil Equivalent, MMBFOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	5.04	12.09	11.76	62.23	14.57	0.47	47.75	0.36	-	154.28
Net Imports	108.68	-	27.05	-	-	-	-	1.30	-	137.03
Total Primary Supply	113.72	12.09	38.81	62.23	14.57	0.47	47.75	1.66	-	291.31
Share	39.04	4.15	13.32	21.36	5.00	0.16	16.39	0.57	-	100.00
Oil Refining	(5.69)	-	-	-	-	-	-	-	-	(5.69)
Transmission & Distribution	-	-	-	-	-	-	-	-	(3.55)	(3.55)
Electricity Generation	(15.55)	(11.54)	(31.68)	(62.23)	(14.57)	(0.36)	-	-	35.19	(100.74)
Total Transformation	(21.24)	(11.54)	(31.68)	(62.23)	(14.57)	(0.36)	-	-	31.64	(109.98)
Industrial	15.73	0.48	6.71	-	-	0.01	10.32	-	9.94	43.19
Commercial	4.67	-	-	-	-	0.01	1.51	-	9.82	16.01
Transport	58.48	0.06	-	-	-	-	-	1.66	0.04	60.25
Agriculture	2.61	-	-	-	-	0.04	-	-	0.00	2.65
Residential	7.40	-	-	-	-	0.04	35.92	-	11.84	55.20
Final Energy Demand	88.89	0.55	6.71	-	-	0.11	47.75	1.66	31.64	177.31
Savings from Energy Efficiency and Conservation										12.65
Final Energy Demand with Savings										164.66
Self-sufficiency, in percent										52.96

(In Thousand Tonnes of Oil Equivalent, KTOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	728.22	1,745.87	1,698.52	8,986.14	2,104.14	67.85	6,895.66	51.98	-	22,278.38
Net Imports	15,693.61	-	3,906.12	-	-	-	-	187.72	-	19,787.45
Total Primary Supply	16,421.84	1,745.87	5,604.64	8,986.14	2,104.14	67.85	6,895.66	239.70	-	42,065.84
Share	39.04	4.15	13.32	21.36	5.00	0.16	16.39	0.57	-	100.00
Oil Refining	(821.64)	-	-	-	-	-	-	-	-	(821.64)
Transmission & Distribution	-	-	-	-	-	-	-	-	(512.39)	(512.39)
Electricity Generation	(2,246.01)	(1,667.06)	(4,573.96)	(8,986.14)	(2,104.14)	(51.89)	-	-	5,081.65	(14,547.54)
Total Transformation	(3,067.65)	(1,667.06)	(4,573.96)	(8,986.14)	(2,104.14)	(51.89)	-	-	4,569.26	(15,881.58)
Industrial	2,262.88	0.07	1,066.84	-	-	0.73	1,490.37	-	1,435.09	6,255.98
Commercial	672.75	-	-	-	-	1.88	217.99	-	1,418.43	2,311.05
Transport	8,451.92	0.01	-	-	-	-	-	239.70	5.87	8,697.51
Agriculture	376.87	-	-	-	-	5.72	-	-	0.39	382.98
Residential	1,068.27	-	-	-	-	4.88	5,187.30	-	1,709.49	7,969.94
Final Energy Demand	12,832.70	0.08	1,066.84	-	-	13.22	6,895.66	239.70	4,569.27	25,617.46
Savings from Energy Efficiency and Conservation										1,826.66
Final Energy Demand with Savings										23,790.80
Self-sufficiency, in percent										52.96

Annex A.1.1

OVERALL ENERGY BALANCE, 2007, High Indigenous Case

(In Million Barrels of Fuel Oil Equivalent, MMBFOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	17.13	13.64	12.95	64.79	14.59	0.61	48.20	0.38	-	172.29
Net Imports	95.85	-	33.02	-	-	-	-	1.37	-	130.24
Total Primary Supply	112.97	13.64	45.96	64.79	14.59	0.61	48.20	1.75	-	302.53
Share	37.34	4.51	15.19	21.41	4.82	0.20	15.93	0.58	-	100.00
Oil Refining	(5.69)	-	-	-	-	-	-	-	-	(5.69)
Transmission & Distribution	-	-	-	-	-	-	-	-	(3.71)	(3.71)
Electricity Generation	(12.21)	(12.35)	(38.74)	(64.79)	(14.59)	(0.50)	-	-	36.73	(106.45)
Total Transformation	(17.90)	(12.35)	(38.74)	(64.79)	(14.59)	(0.50)	-	-	33.02	(115.84)
Industrial	16.25	0.56	6.79	-	-	0.01	10.93	-	10.29	44.82
Commercial	4.99	-	-	-	-	0.01	1.57	-	10.28	16.84
Transport	60.18	0.74	-	-	-	-	-	1.75	0.04	62.71
Agriculture	2.68	-	-	-	-	0.04	-	-	0.00	2.72
Residential	7.62	-	-	-	-	0.04	35.71	-	12.41	55.78
Final Energy Demand	91.71	1.30	6.79	-	-	0.11	48.20	1.75	33.02	182.88
Savings from Energy Efficiency and Conservation										13.80
Final Energy Demand with Savings										169.08
Self-sufficiency, in percent										56.95

(In Thousand Tonnes of Oil Equivalent, KTOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	2,473.00	1,970.04	1,869.34	9,355.08	2,107.49	88.63	6,960.71	54.87	-	24,879.17
Net Imports	13,840.52	-	4,767.68	-	-	-	-	197.83	-	18,806.03
Total Primary Supply	16,313.52	1,970.04	6,637.02	9,355.08	2,107.49	88.63	6,960.71	252.70	-	43,685.20
Share	37.34	4.51	15.19	21.41	4.82	0.20	15.93	0.58	-	100.00
Oil Refining	(821.64)	-	-	-	-	-	-	-	-	(821.64)
Transmission & Distribution	-	-	-	-	-	-	-	-	(535.29)	(535.29)
Electricity Generation	(1,762.92)	(1,782.91)	(5,594.17)	(9,355.08)	(2,107.49)	(72.29)	-	-	5,303.36	(15,371.50)
Total Transformation	(2,584.56)	(1,782.91)	(5,594.17)	(9,355.08)	(2,107.49)	(72.29)	-	-	4,768.07	(16,728.43)
Industrial	2,337.60	0.08	1,079.44	-	-	0.75	1,578.32	-	1,485.19	6,481.39
Commercial	718.64	-	-	-	-	1.94	226.10	-	1,484.11	2,430.78
Transport	8,696.62	0.11	-	-	-	-	-	252.70	6.17	8,955.60
Agriculture	386.88	-	-	-	-	5.79	-	-	0.41	393.07
Residential	1,100.41	-	-	-	-	5.03	5,156.29	-	1,792.18	8,053.91
Final Energy Demand	13,240.14	0.19	1,079.44	-	-	13.51	6,960.71	252.70	4,768.06	26,314.76
Savings from Energy Efficiency and Conservation										1,992.72
Final Energy Demand with Savings										24,322.04
Self-sufficiency, in percent										56.95

Annex A.1.1

OVERALL ENERGY BALANCE, 2008, High Indigenous Case

(In Million Barrels of Fuel Oil Equivalent, MMBFOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	14.06	14.52	13.71	66.98	16.60	0.62	48.69	1.83	-	177.01
Net Imports	101.97	-	32.87	-	-	-	-	-	-	134.84
Total Primary Supply	116.03	14.52	46.58	66.98	16.60	0.62	48.69	1.83	-	311.84
Share	37.21	4.65	14.94	21.48	5.32	0.20	15.61	0.59	-	100.00
Oil Refining	(5.69)	-	-	-	-	-	-	-	-	(5.69)
Transmission & Distribution	-	-	-	-	-	-	-	-	(3.86)	(3.86)
Electricity Generation	(11.97)	(13.14)	(39.27)	(66.98)	(16.60)	(0.50)	-	-	38.26	(110.21)
Total Transformation	(17.65)	(13.14)	(39.27)	(66.98)	(16.60)	(0.50)	-	-	34.40	(119.75)
Industrial	16.90	0.57	6.87	-	-	0.02	11.58	-	10.63	46.56
Commercial	5.34	-	-	-	-	0.01	1.62	-	10.74	17.71
Transport	62.40	0.81	-	-	-	-	-	1.83	0.04	65.08
Agriculture	2.75	-	-	-	-	0.04	-	-	0.00	2.79
Residential	7.85	-	-	-	-	0.05	35.49	-	12.98	56.37
Final Energy Demand	95.23	1.38	6.87	-	-	0.12	48.69	1.83	34.40	188.51
Savings from Energy Efficiency and Conservation										15.05
Final Energy Demand with Savings										173.46
Self-sufficiency, in percent										56.76

(In Thousand Tonnes of Oil Equivalent, KTOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	2,029.65	2,096.09	1,979.99	9,671.56	2,397.68	89.29	7,031.27	264.25	-	25,559.78
Net Imports	14,724.38	-	4,745.93	-	-	-	-	-	-	19,470.32
Total Primary Supply	16,754.03	2,096.09	6,725.92	9,671.56	2,397.68	89.29	7,031.27	264.25	-	45,030.10
Share	37.21	4.65	14.94	21.48	5.32	0.20	15.61	0.59	-	100.00
Oil Refining	(821.64)	-	-	-	-	-	-	-	-	(821.64)
Transmission & Distribution	-	-	-	-	-	-	-	-	(557.03)	(557.03)
Electricity Generation	(1,728.07)	(1,897.36)	(5,670.73)	(9,671.56)	(2,397.68)	(72.58)	-	-	5,524.04	(15,913.95)
Total Transformation	(2,549.71)	(1,897.36)	(5,670.73)	(9,671.56)	(2,397.68)	(72.58)	-	-	4,967.01	(17,292.62)
Industrial	2,431.71	0.08	1,092.21	-	-	0.77	1,671.47	-	1,535.47	6,731.70
Commercial	769.38	-	-	-	-	2.00	234.51	-	1,550.58	2,556.47
Transport	9,017.19	0.12	-	-	-	-	-	264.25	6.48	9,288.04
Agriculture	396.89	-	-	-	-	5.85	-	-	0.44	403.18
Residential	1,133.26	-	-	-	-	5.18	5,125.29	-	1,874.05	8,137.77
Final Energy Demand	13,748.42	0.20	1,092.21	-	-	13.80	7,031.27	264.25	4,967.01	27,117.15
Savings from Energy Efficiency and Conservation										2,173.22
Final Energy Demand with Savings										24,943.93
Self-sufficiency, in percent										56.76

Annex A.1.1

OVERALL ENERGY BALANCE, 2009, High Indigenous Case

(In Million Barrels of Fuel Oil Equivalent, MMBFOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	11.96	15.37	15.12	70.67	19.27	0.62	49.22	1.91	-	184.15
Net Imports	108.24	-	31.35	-	-	-	-	-	-	139.59
Total Primary Supply	120.20	15.37	46.48	70.67	19.27	0.62	49.22	1.91	-	323.74
Share	37.13	4.75	14.36	21.83	5.95	0.19	15.20	0.59	-	100.00
Oil Refining	(5.69)	-	-	-	-	-	-	-	-	(5.69)
Transmission & Distribution	-	-	-	-	-	-	-	-	(4.08)	(4.08)
Electricity Generation	(12.56)	(13.92)	(39.08)	(70.67)	(19.27)	(0.50)	-	-	40.42	(115.58)
Total Transformation	(18.25)	(13.92)	(39.08)	(70.67)	(19.27)	(0.50)	-	-	36.34	(125.35)
Industrial	17.65	0.58	6.95	-	-	0.02	12.26	-	11.12	48.57
Commercial	5.73	-	-	-	-	0.01	1.68	-	11.39	18.81
Transport	64.62	0.88	-	-	-	-	-	1.91	0.05	67.45
Agriculture	2.82	-	-	-	-	0.04	-	-	0.00	2.86
Residential	8.08	-	-	-	-	0.05	35.28	-	13.79	57.20
Final Energy Demand	98.90	1.46	6.95	-	-	0.12	49.22	1.91	36.34	194.90
Savings from Energy Efficiency and Conservation										16.22
Final Energy Demand with Savings										178.68
Self-sufficiency, in percent										56.88

(In Thousand Tonnes of Oil Equivalent, KTOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	1,727.07	2,219.97	2,183.96	10,204.07	2,782.67	89.95	7,107.63	275.80	-	26,591.12
Net Imports	15,629.93	-	4,527.58	-	-	-	-	-	-	20,157.51
Total Primary Supply	17,357.00	2,219.97	6,711.54	10,204.07	2,782.67	89.95	7,107.63	275.80	-	46,748.63
Share	37.13	4.75	14.36	21.83	5.95	0.19	15.20	0.59	-	100.00
Oil Refining	(821.64)	-	-	-	-	-	-	-	-	(821.64)
Transmission & Distribution	-	-	-	-	-	-	-	-	(589.20)	(589.20)
Electricity Generation	(1,814.28)	(2,009.38)	(5,643.84)	(10,204.07)	(2,782.67)	(72.87)	-	-	5,837.08	(16,690.03)
Total Transformation	(2,635.92)	(2,009.38)	(5,643.84)	(10,204.07)	(2,782.67)	(72.87)	-	-	5,247.88	(18,100.87)
Industrial	2,540.31	0.08	1,105.16	-	-	0.79	1,770.11	-	1,605.18	7,021.63
Commercial	825.59	-	-	-	-	2.05	243.24	-	1,644.34	2,715.22
Transport	9,337.77	0.13	-	-	-	-	-	275.80	6.78	9,620.49
Agriculture	406.90	-	-	-	-	5.92	-	-	0.47	413.28
Residential	1,167.06	-	-	-	-	5.32	5,094.28	-	1,991.10	8,257.76
Final Energy Demand	14,277.63	0.21	1,105.16	-	-	14.09	7,107.63	275.80	5,247.87	28,028.39
Savings from Energy Efficiency and Conservation										2,342.17
Final Energy Demand with Savings										25,686.22
Self-sufficiency, in percent										56.88

Annex A.1.1

OVERALL ENERGY BALANCE, 2010, High Indigenous Case

(In Million Barrels of Fuel Oil Equivalent, MMBFOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	22.49	18.47	16.86	73.27	22.11	0.63	49.79	1.99	-	205.62
Net Imports	98.65	-	28.85	-	-	-	-	-	-	127.50
Total Primary Supply	121.14	18.47	45.72	73.27	22.11	0.63	49.79	1.99	-	333.13
Share	36.37	5.55	13.72	22.00	6.64	0.19	14.95	0.60	-	100.00
Oil Refining	(5.69)	-	-	-	-	-	-	-	-	(5.69)
Transmission & Distribution	-	-	-	-	-	-	-	-	(4.29)	(4.29)
Electricity Generation	(9.70)	(16.72)	(38.23)	(73.27)	(22.11)	(0.50)	-	-	42.45	(118.09)
Total Transformation	(15.38)	(16.72)	(38.23)	(73.27)	(22.11)	(0.50)	-	-	38.16	(128.07)
Industrial	18.38	0.72	7.03	-	-	0.02	12.98	-	11.56	50.70
Commercial	6.16	-	-	-	-	0.01	1.75	-	11.99	19.91
Transport	66.76	1.03	-	-	-	-	-	1.99	0.05	69.83
Agriculture	2.89	-	-	-	-	0.04	-	-	0.00	2.93
Residential	8.32	-	-	-	-	0.05	35.06	-	14.55	57.99
Final Energy Demand	102.51	1.75	7.03	-	-	0.12	49.79	1.99	38.16	201.36
Savings from Energy Efficiency and Conservation										17.51
Final Energy Demand with Savings										183.85
Self-sufficiency, in percent										61.72

(In Thousand Tonnes of Oil Equivalent, KTOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	3,247.87	2,667.74	2,434.83	10,580.37	3,193.12	90.32	7,190.13	287.36	-	29,691.75
Net Imports	14,244.99	-	4,166.61	-	-	-	-	-	-	18,411.60
Total Primary Supply	17,492.87	2,667.74	6,601.45	10,580.37	3,193.12	90.32	7,190.13	287.36	-	48,103.35
Share	36.37	5.55	13.72	22.00	6.64	0.19	14.95	0.60	-	100.00
Oil Refining	(821.64)	-	-	-	-	-	-	-	-	(821.64)
Transmission & Distribution	-	-	-	-	-	-	-	-	(619.53)	(619.53)
Electricity Generation	(1,400.05)	(2,414.32)	(5,521.07)	(10,580.37)	(3,193.12)	(72.87)	-	-	6,129.39	(17,052.40)
Total Transformation	(2,221.69)	(2,414.32)	(5,521.07)	(10,580.37)	(3,193.12)	(72.87)	-	-	5,509.87	(18,493.57)
Industrial	2,644.99	0.10	1,118.28	-	-	0.82	1,874.57	-	1,669.78	7,308.53
Commercial	888.41	-	-	-	-	2.11	252.29	-	1,730.79	2,873.60
Transport	9,646.88	0.15	-	-	-	-	-	287.36	7.09	9,941.48
Agriculture	416.91	-	-	-	-	5.98	-	-	0.50	423.39
Residential	1,201.66	-	-	-	-	5.47	5,063.28	-	2,101.71	8,372.12
Final Energy Demand	14,798.85	0.25	1,118.28	-	-	14.38	7,190.13	287.36	5,509.87	28,919.12
Savings from Energy Efficiency and Conservation										2,528.44
Final Energy Demand with Savings										26,390.67
Self-sufficiency, in percent										61.72

Annex A.1.1

OVERALL ENERGY BALANCE, 2011, High Indigenous Case

(In Million Barrels of Fuel Oil Equivalent, MMBFOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	22.70	21.07	18.14	79.08	22.42	0.63	50.41	2.07	-	216.51
Net Imports	102.28	-	27.53	-	-	-	-	-	-	129.81
Total Primary Supply	124.98	21.07	45.67	79.08	22.42	0.63	50.41	2.07	-	346.32
Share	36.09	6.08	13.19	22.83	6.47	0.18	14.56	0.60	-	100.00
Oil Refining	(5.69)	-	-	-	-	-	-	-	-	(5.69)
Transmission & Distribution	-	-	-	-	-	-	-	-	(4.52)	(4.52)
Electricity Generation	(10.11)	(19.00)	(38.10)	(79.08)	(22.42)	(0.50)	-	-	44.63	(124.58)
Total Transformation	(15.80)	(19.00)	(38.10)	(79.08)	(22.42)	(0.50)	-	-	40.12	(134.78)
Industrial	19.12	0.85	7.12	-	-	0.02	13.75	-	12.05	52.91
Commercial	6.60	-	-	-	-	0.01	1.81	-	12.63	21.05
Transport	68.86	1.21	-	-	-	-	-	2.07	0.05	72.20
Agriculture	2.96	-	-	-	-	0.04	-	-	0.00	3.00
Residential	8.56	-	-	-	-	0.05	34.85	-	15.38	58.84
Final Energy Demand	106.11	2.07	7.12	-	-	0.12	50.41	2.07	40.12	208.01
Savings from Energy Efficiency and Conservation										18.92
Final Energy Demand with Savings										189.09
Self-sufficiency, in percent										62.52

(In Thousand Tonnes of Oil Equivalent, KTOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	3,277.56	3,041.86	2,619.93	11,419.25	3,236.99	90.69	7,279.14	298.91	-	31,264.34
Net Imports	14,769.20	-	3,974.87	-	-	-	-	-	-	18,744.07
Total Primary Supply	18,046.77	3,041.86	6,594.80	11,419.25	3,236.99	90.69	7,279.14	298.91	-	50,008.41
Share	36.09	6.08	13.19	22.83	6.47	0.18	14.56	0.60	-	100.00
Oil Refining	(821.64)	-	-	-	-	-	-	-	-	(821.64)
Transmission & Distribution	-	-	-	-	-	-	-	-	(652.27)	(652.27)
Electricity Generation	(1,459.70)	(2,743.25)	(5,501.57)	(11,419.25)	(3,236.99)	(72.87)	-	-	6,444.93	(17,988.70)
Total Transformation	(2,281.34)	(2,743.25)	(5,501.57)	(11,419.25)	(3,236.99)	(72.87)	-	-	5,792.66	(19,462.61)
Industrial	2,751.47	0.12	1,131.58	-	-	0.84	1,985.19	-	1,740.27	7,609.48
Commercial	950.82	-	-	-	-	2.17	261.68	-	1,823.67	3,038.33
Transport	9,951.52	0.17	-	-	-	-	-	298.91	7.39	10,257.99
Agriculture	426.92	-	-	-	-	6.05	-	-	0.54	433.51
Residential	1,236.89	-	-	-	-	5.62	5,032.27	-	2,220.79	8,495.57
Final Energy Demand	15,317.63	0.30	1,131.58	-	-	14.67	7,279.14	298.91	5,792.66	29,834.88
Savings from Energy Efficiency and Conservation										2,732.05
Final Energy Demand with Savings										27,102.83
Self-sufficiency, in percent										62.52

Annex A.1.1

OVERALL ENERGY BALANCE, 2012, High Indigenous Case

(In Million Barrels of Fuel Oil Equivalent, MMBFOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	24.36	23.94	20.49	83.40	22.98	0.63	51.07	2.15	-	229.03
Net Imports	104.78	-	25.31	-	-	-	-	-	-	130.09
Total Primary Supply	129.14	23.94	45.80	83.40	22.98	0.63	51.07	2.15	-	359.12
Share	35.96	6.67	12.75	23.22	6.40	0.18	14.22	0.60	-	100.00
Oil Refining	(5.69)	-	-	-	-	-	-	-	-	(5.69)
Transmission & Distribution	-	-	-	-	-	-	-	-	(4.76)	(4.76)
Electricity Generation	(10.57)	(21.55)	(38.14)	(83.40)	(22.98)	(0.50)	-	-	47.01	(130.14)
Total Transformation	(16.26)	(21.55)	(38.14)	(83.40)	(22.98)	(0.50)	(10.73)	-	42.25	(151.32)
Industrial	19.91	1.04	7.20	-	-	0.02	14.56	-	12.57	55.30
Commercial	7.06	-	-	-	-	0.02	1.88	-	13.32	22.28
Transport	71.02	1.35	-	-	-	-	-	2.15	0.05	74.57
Agriculture	3.03	-	-	-	-	0.04	-	-	0.00	3.07
Residential	8.81	-	-	-	-	0.05	34.63	-	16.29	59.79
Final Energy Demand	109.83	2.39	7.20	-	-	0.13	51.07	2.15	42.25	215.02
Savings from Energy Efficiency and Conservation										20.39
Final Energy Demand with Savings										194.63
Self-sufficiency, in percent										63.78

(In Thousand Tonnes of Oil Equivalent, KTOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	3,517.67	3,456.57	2,959.02	12,043.49	3,318.85	91.07	7,375.03	310.46	-	33,072.15
Net Imports	15,130.38	-	3,654.32	-	-	-	-	-	-	18,784.70
Total Primary Supply	18,648.05	3,456.57	6,613.34	12,043.49	3,318.85	91.07	7,375.03	310.46	-	51,856.85
Share	35.96	6.67	12.75	23.22	6.40	0.18	14.22	0.60	-	100.00
Oil Refining	(821.64)	-	-	-	-	-	-	-	-	(821.64)
Transmission & Distribution	-	-	-	-	-	-	-	-	(687.99)	(687.99)
Electricity Generation	(1,526.76)	(3,111.83)	(5,507.09)	(12,043.49)	(3,318.85)	(72.87)	-	-	6,788.32	(18,792.57)
Total Transformation	(2,348.40)	(3,111.83)	(5,507.09)	(12,043.49)	(3,318.85)	(72.87)	(10.73)	-	6,100.34	(20,312.93)
Industrial	2,865.15	0.15	1,145.06	-	-	0.86	2,102.35	-	1,814.97	7,928.53
Commercial	1,017.66	-	-	-	-	2.22	271.41	-	1,924.11	3,215.41
Transport	10,263.14	0.19	-	-	-	-	-	310.46	7.70	10,581.49
Agriculture	436.93	-	-	-	-	6.11	-	-	0.58	443.62
Residential	1,272.75	-	-	-	-	5.76	5,001.27	-	2,352.98	8,632.76
Final Energy Demand	15,855.63	0.34	1,145.06	-	-	14.96	7,375.03	310.46	6,100.34	30,801.81
Savings from Energy Efficiency and Conservation										2,944.32
Final Energy Demand with Savings										27,857.50
Self-sufficiency, in percent										63.78

Annex A.1.1

OVERALL ENERGY BALANCE, 2013, High Indigenous Case

(In Million Barrels of Fuel Oil Equivalent, MMBFOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	21.96	27.85	21.07	86.72	23.90	0.63	51.79	2.24	-	236.16
Net Imports	110.99	-	25.13	-	-	-	-	-	-	136.12
Total Primary Supply	132.95	27.85	46.20	86.72	23.90	0.63	51.79	2.24	-	372.28
Share	35.71	7.48	12.41	23.29	6.42	0.17	13.91	0.60	-	100.00
Oil Refining	(5.69)	-	-	-	-	-	-	-	-	(5.69)
Transmission & Distribution	-	-	-	-	-	-	-	-	(5.05)	(5.05)
Electricity Generation	(10.45)	(25.26)	(38.44)	(86.72)	(23.90)	(0.50)	-	-	49.69	(135.60)
Total Transformation	(16.14)	(25.26)	(38.44)	(86.72)	(23.90)	(0.50)	-	-	44.64	(146.33)
Industrial	20.78	1.18	7.29	-	-	0.02	15.42	-	13.18	57.85
Commercial	7.56	-	-	-	-	0.02	1.95	-	14.11	23.64
Transport	73.23	1.42	-	-	-	-	-	2.24	0.06	76.95
Agriculture	3.10	-	-	-	-	0.04	-	-	0.00	3.14
Residential	9.07	-	-	-	-	0.05	34.42	-	17.29	60.83
Final Energy Demand	113.73	2.59	7.29	-	-	0.13	51.79	2.24	44.64	222.41
Savings from Energy Efficiency and Conservation										21.75
Final Energy Demand with Savings										200.66
Self-sufficiency, in percent										63.44

(In Thousand Tonnes of Oil Equivalent, KTOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	3,170.79	4,021.92	3,042.14	12,522.38	3,451.40	91.44	7,478.19	323.46	-	34,101.72
Net Imports	16,026.57	-	3,628.71	-	-	-	-	-	-	19,655.28
Total Primary Supply	19,197.37	4,021.92	6,670.85	12,522.38	3,451.40	91.44	7,478.19	323.46	-	53,757.00
Share	35.71	7.48	12.41	23.29	6.42	0.17	13.91	0.60	-	100.00
Oil Refining	(821.64)	-	-	-	-	-	-	-	-	(821.64)
Transmission & Distribution	-	-	-	-	-	-	-	-	(728.88)	(728.88)
Electricity Generation	(1,509.45)	(3,647.40)	(5,551.40)	(12,522.38)	(3,451.40)	(72.87)	-	-	7,174.81	(19,580.09)
Total Transformation	(2,331.09)	(3,647.40)	(5,551.40)	(12,522.38)	(3,451.40)	(72.87)	-	-	6,445.93	(21,130.61)
Industrial	2,989.74	0.17	1,158.72	-	-	0.88	2,226.41	-	1,902.92	8,278.85
Commercial	1,089.24	-	-	-	-	2.28	281.51	-	2,037.83	3,410.86
Transport	10,582.28	0.20	-	-	-	-	-	323.46	8.00	10,913.94
Agriculture	446.94	-	-	-	-	6.18	-	-	0.63	453.75
Residential	1,309.50	-	-	-	-	5.91	4,970.26	-	2,496.55	8,782.22
Final Energy Demand	16,417.70	0.37	1,158.72	-	-	15.25	7,478.19	323.46	6,445.93	31,839.62
Savings from Energy Efficiency and Conservation										3,140.70
Final Energy Demand with Savings										28,698.92
Self-sufficiency, in percent										63.44

Annex A.1.1

OVERALL ENERGY BALANCE, 2014, High Indigenous Case

(In Million Barrels of Fuel Oil Equivalent, MMBFOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	14.58	30.93	23.32	90.64	23.90	0.64	52.56	2.32	-	238.88
Net Imports	122.79	-	22.88	-	-	-	-	-	-	145.66
Total Primary Supply	137.37	30.93	46.19	90.64	23.90	0.64	52.56	2.32	-	384.54
Share	35.72	8.04	12.01	23.57	6.22	0.17	13.67	0.60	-	100.00
Oil Refining	(5.69)	-	-	-	-	-	-	-	-	(5.69)
Transmission & Distribution	-	-	-	-	-	-	-	-	(5.32)	(5.32)
Electricity Generation	(10.87)	(28.18)	(38.35)	(90.64)	(23.90)	(0.50)	-	-	52.35	(140.09)
Total Transformation	(16.56)	(28.18)	(38.35)	(90.64)	(23.90)	(0.50)	-	-	47.03	(151.10)
Industrial	21.68	1.31	7.38	-	-	0.02	16.33	-	13.79	60.51
Commercial	8.09	-	-	-	-	0.02	2.02	-	14.90	25.03
Transport	75.51	1.43	-	-	-	-	-	2.32	0.06	79.32
Agriculture	3.17	-	-	-	-	0.04	-	-	0.00	3.21
Residential	9.33	-	-	-	-	0.05	34.21	-	18.28	61.86
Final Energy Demand	117.78	2.74	7.38	-	-	0.13	52.56	2.32	47.03	229.93
Savings from Energy Efficiency and Conservation										23.00
Final Energy Demand with Savings										206.93
Self-sufficiency, in percent										62.12

(In Thousand Tonnes of Oil Equivalent, KTOE)

	Oil and Oil Products	Natural Gas	Coal	Geothermal	Hydropower	Solar, Wind & Micro-hydro	Biomass	CME & Ethanol	Electricity	Total
Production	2,105.67	4,466.04	3,366.95	13,087.79	3,451.40	91.81	7,589.05	335.01	-	34,493.72
Net Imports	17,730.72	-	3,303.30	-	-	-	-	-	-	21,034.02
Total Primary Supply	19,836.39	4,466.04	6,670.25	13,087.79	3,451.40	91.81	7,589.05	335.01	-	55,527.74
Share	35.72	8.04	12.01	23.57	6.22	0.17	13.67	0.60	-	100.00
Oil Refining	(821.64)	-	-	-	-	-	-	-	-	(821.64)
Transmission & Distribution	-	-	-	-	-	-	-	-	(768.54)	(768.54)
Electricity Generation	(1,569.38)	(4,069.91)	(5,537.42)	(13,087.79)	(3,451.40)	(72.87)	-	-	7,559.14	(20,229.62)
Total Transformation	(2,391.02)	(4,069.91)	(5,537.42)	(13,087.79)	(3,451.40)	(72.87)	-	-	6,790.60	(21,819.79)
Industrial	3,120.36	0.19	1,172.57	-	-	0.90	2,357.80	-	1,991.14	8,642.97
Commercial	1,165.90	-	-	-	-	2.33	291.99	-	2,151.55	3,611.77
Transport	10,911.56	0.21	-	-	-	-	-	335.01	8.31	11,255.08
Agriculture	456.95	-	-	-	-	6.24	-	-	0.67	463.86
Residential	1,346.83	-	-	-	-	6.06	4,939.26	-	2,638.94	8,931.08
Final Energy Demand	17,001.60	0.40	1,172.57	-	-	15.54	7,589.05	335.01	6,790.61	32,904.77
Savings from Energy Efficiency and Conservation										3,321.20
Final Energy Demand with Savings										29,583.57
Self-sufficiency, in percent										62.12