

Annex 4 – CO₂ Reference Approach and comparison with sectoral approach; Energy Balance

2005 Energy Balance	Total			Bituminous coal			
	tce	toe	GJ	tonnes	tce	toe	
1. Primary production (recovered products included)	38803632	27154394	1136946416	-	-	-	-
2. Imports	24395286	17071577	714781882	3810117	3544444	2480367	103852210
3. Opening stock	6518597	4561649	190994893	363086	331984	232319	9727131
4. TOTAL RESOURCES	69717515	48787620	2042723191	4173203	3876428	2712686	113579341
5. Exports	9337128	6534028	273577852	35439	31876	22306	933967
6. Bunkers	6175528	-	-	-	-	-	-
7. Closing stock	54204859	4321574	180942974	516631	473498	331350	13873491
8. GROSS INLAND CONSUMPTION	40677220	37932018	1588202365	3212469	3371054	2359030	98771883
9. Transformation input	11027301	28465516	1191842551	3621133	2984897	2088802	87457482
10. Conventional thermal power stations	4721025	7716797	323099920	-	-	-	-
11. Nuclear power stations	1946055	1361830	57019412	-	-	-	-
12. Heat plants	-	3303726	138326037	-	-	-	-
13. Patent fuel plants	-	-	-	-	-	-	-
14. Coke-oven plants	2279516	1595183	66789819	2428712	2279516	1595183	66789819
15. Blast-furnace plants	705381	493619	20667663	783757	705381	493619	20667663
16. Refineries	19997942	13994361	585939700	-	-	-	-
17. Other	-	-	-	-	-	-	-
18. Transformation output	33785898	23643035	989926815	1891202	1702082	1191100	49871003
19. Conventional thermal power stations	4139039	2896458	121273843	-	-	-	-
20. Nuclear power stations	683260	478139	20019518	-	-	-	-
21. Heat plants	4357002	3048987	127660159	-	-	-	-
22. Patent fuel plants	-	-	-	-	-	-	-
23. Coke-oven plants	2131749	1491777	62460246	1891202	1702082	1191100	49871003
24. Blast-furnace plants	846929	592672	24815020	-	-	-	-
25. Refineries	21627919	15135002	633698029	-	-	-	-
26. Other	-	-	-	-	-	-	-
27. TRANSFERS	-	-	-	-	-	-	-
28. CONSUMPTION OF THE ENERGY SECTOR	6264971	4384165	183563652	1022	891	624	26106
29. Coal mining and preparation	162423	113662	4758994	-	-	-	-
30. Hydrocarbons extraction and annexed services	1705688	1193625	49976659	-	-	-	-
31. Radioactive ores quarrying	10494	7344	307474	-	-	-	-
32. Crude oil processing, coal coking and nuclear fuel treatment	2859729	2001210	83790059	1022	891	624	26106
33. Electric and thermal energy production, transport and distribution	1526637	1068324	44730466	-	-	-	-
34. Losses	2665892	1865563	78110635	22780	21070	14744	617351
35. AVAILABLE FOR FINAL CONSUMPTION	38382674	26859809	1124612342	2276064	2066278	1445960	60541947
36. Non-energy consumption	3188090	2230995	93411036	68612	61751	43213	1809304
37. FINAL ENERGY CONSUMPTION	35870059	25101511	1050992750	1758116	1580572	1106068	46310760
38. Industry	15011977	10505231	439850940	1757959	1580430	1105969	46306599
39. Mining of metal ores	61261	42870	1794949	-	-	-	-
40. Other mining and quarrying	44664	31256	1308655	-	-	-	-
41. Food, beverages and tobacco	1410067	986750	41314967	2908	2617	1831	76678
42. Textile and textile products	163478	114401	4789905	-	-	-	-
43. Textile fur and leather wearing apparel	96956	67849	2840811	-	-	-	-
44. Leather goods and foot wear	39542	27670	1158582	-	-	-	-
45. Wood and products of wood	290409	203226	8508985	-	-	-	-
46. Pulp, paper and paper products	323596	226450	9481365	-	-	-	-
47. Publishing, printing and reproduction of recorded media	57705	40381	1690757	-	-	-	-
48. Chemistry and chemical products	3592907	2514282	105272175	75812	66505	46540	1948596
49. Rubber and plastic products	227100	158920	6654033	-	-	-	-
50. Other non-metallic mineral products	1909955	1336568	55961682	6159	5543	3879	162410
51. Metallurgy	4962671	3472825	145406259	1671894	1504698	1052973	44087651
52. Metal products, machinery and equipment	865873	605931	25370079	1180	1062	743	31117
53. Furniture and other unclassified activities	155707	108963	4562215	-	-	-	-
54. Waste recovering	6507	4554	190655	-	-	-	-
55. Water collection, treatment and distribution	214044	149785	6271490	-	-	-	-
56. Construction	589535	412550	17273376	6	5	3	147
57. Transport	6064298	4243737	177683932	69	62	43	1817
58. Households	11510715	8055084	337263952	32	30	21	879
59. Agriculture and Forestry	289485	202579	8481912	56	50	35	1465
60. Other economic activities	2993584	2094880	87712014	-	-	-	-
61. Statistical difference	-675475	-472697	-19791444	449336	423955	296679	12421883

	Steam coal				Other coal			
	tonnes	tce	toe	GJ	tonnes	tce	toe	GJ
1. Primary production (recovered products included)	3017058	1546013	1081884	45298181	28088190	6731984	4710975	197247132
2. Imports	620117	520718	364393	15257037	368012	115975	81158	3398068
3. Opening stock	685554	388472	271849	11382230	4436072	1072061	750217	31411388
4. TOTAL RESOURCES	4322729	2455203	1718126	71937448	32892274	7920020	5542350	232056588
5. Exports	-	-	-	-	-	-	-	-
6. Bunkers	-	-	-	-	-	-	-	-
7. Closing stock	688804	394986	276407	11573090	3565479	859252	601296	25176084
8. GROSS INLAND CONSUMPTION	3633925	2060217	1441719	60364358	29326795	7060768	4941054	206880504
9. Transformation input	3259756	1782788	1247578	52235690	28442740	6846076	4790816	200590028
10. Conventional thermal power stations	2851053	1528569	1069678	44787072	25123223	6044970	4230210	177117622
11. Nuclear power stations	-	-	-	-	-	-	-	-
12. Heat plants	408703	254219	177900	7448618	3319517	801106	560606	23472406
13. Patent fuel plants	-	-	-	-	-	-	-	-
14. Coke-oven plants	-	-	-	-	-	-	-	-
15. Blast-furnace plants	-	-	-	-	-	-	-	-
16. Refineries	-	-	-	-	-	-	-	-
17. Other	-	-	-	-	-	-	-	-
18. Transformation output	-	-	-	-	-	-	-	-
19. Conventional thermal power stations	-	-	-	-	-	-	-	-
20. Nuclear power stations	-	-	-	-	-	-	-	-
21. Heat plants	-	-	-	-	-	-	-	-
22. Patent fuel plants	-	-	-	-	-	-	-	-
23. Coke-oven plants	-	-	-	-	-	-	-	-
24. Blast-furnace plants	-	-	-	-	-	-	-	-
25. Refineries	-	-	-	-	-	-	-	-
26. Other	-	-	-	-	-	-	-	-
27. TRANSFERS	-	-	-	-	-	-	-	-
28. CONSUMPTION OF THE ENERGY SECTOR	5279	4383	3067	128422	565187	136241	95340	3991862
29. Coal mining and preparation	5153	4297	3007	125902	12528	3322	2325	97335
30. Hydrocarbons extraction and annexed services	-	-	-	-	-	-	-	-
31. Radioactive ores quarrying	-	-	-	-	-	-	-	-
32. Crude oil processing, coal coking and nuclear fuel treatment	-	-	-	-	-	-	-	-
33. Electric and thermal energy production, transport and distribution	126	86	60	2520	552659	132919	93015	3894527
34. Losses	-	-	-	-	8253	1985	1389	58160
35. AVAILABLE FOR FINAL CONSUMPTION	368890	273046	191074	8000246	310615	76466	53509	2240454
36. Non-energy consumption	-	-	-	-	-	-	-	-
37. FINAL ENERGY CONSUMPTION	305270	254133	177840	7446097	740518	178127	124653	5219121
38. Industry	304031	253452	177364	7426143	664749	159872	111877	4684250
39. Mining of metal ores	19	16	11	469	-	-	-	-
40. Other mining and quarrying	-	-	-	-	276	66	46	1934
41. Food, beverages and tobacco	-	-	-	-	-	-	-	-
42. Textile and textile products	-	-	-	-	-	-	-	-
43. Textile fur and leather wearing apparel	-	-	-	-	20	5	3	147
44. Leather goods and foot wear	-	-	-	-	-	-	-	-
45. Wood and products of wood	-	-	-	-	50	12	8	352
46. Pulp, paper and paper products	-	-	-	-	-	-	-	-
47. Publishing, printing and reproduction of recorded media	-	-	-	-	-	-	-	-
48. Chemistry and chemical products	892	744	521	21799	513281	123444	86385	3616909
49. Rubber and plastic products	-	-	-	-	-	-	-	-
50. Other non-metallic mineral products	281	141	99	4131	150420	36176	25316	1059957
51. Metallurgy	302628	252380	176613	7394734	-	-	-	-
52. Metal products, machinery and equipment	-	-	-	-	669	161	113	4717
53. Furniture and other unclassified activities	-	-	-	-	-	-	-	-
54. Waste recovering	-	-	-	-	-	-	-	-
55. Water collection, treatment and distribution	196	163	114	4776	-	-	-	-
56. Construction	15	8	6	234	33	8	6	234
57. Transport	5	4	3	117	4	1	1	29
58. Households	-	-	-	-	73276	17640	12345	516852
59. Agriculture and Forestry	250	122	85	3575	1207	290	203	8497
60. Other economic activities	984	555	388	16262	1282	324	227	9493
61. Statistical difference	63620	18913	13234	554149	-429903	-101661	-71144	-2978667

	Coking coal				Coke and semicoke			
	tonnes	tce	toe	GJ	tonnes	tce	toe	GJ
1. Primary production (recovered products included)	-	-	-	-	-	-	-	-
2. Imports	3051609	2864149	2004303	83919566	675824	608242	425642	17821491
3. Opening stock	137732	129271	90463	3787640	221677	199509	139614	5845614
4. TOTAL RESOURCES	3189341	2993420	2094766	87707206	897501	807751	565256	23667105
5. Exports	-	-	-	-	34778	31300	21903	917090
6. Bunkers	-	-	-	-	-	-	-	-
7. Closing stock	226928	212988	149047	6240548	281893	253704	177540	7433527
8. GROSS INLAND CONSUMPTION	2962413	2780432	1945719	81466658	580830	522747	365813	15316488
9. Transformation input	2428712	2279516	1595183	66789819	783757	705381	493619	20667663
10. Conventional thermal power stations	-	-	-	-	-	-	-	-
11. Nuclear power stations	-	-	-	-	-	-	-	-
12. Heat plants	-	-	-	-	-	-	-	-
13. Patent fuel plants	-	-	-	-	-	-	-	-
14. Coke-oven plants	2428712	2279516	1595183	66789819	-	-	-	-
15. Blast-furnace plants	-	-	-	-	783757	705381	493619	20667663
16. Refineries	-	-	-	-	-	-	-	-
17. Other	-	-	-	-	-	-	-	-
18. Transformation output	-	-	-	-	1891202	1702082	1191100	49871003
19. Conventional thermal power stations	-	-	-	-	-	-	-	-
20. Nuclear power stations	-	-	-	-	-	-	-	-
21. Heat plants	-	-	-	-	-	-	-	-
22. Patent fuel plants	-	-	-	-	-	-	-	-
23. Coke-oven plants	-	-	-	-	1891202	1702082	1191100	49871003
24. Blast-furnace plants	-	-	-	-	-	-	-	-
25. Refineries	-	-	-	-	-	-	-	-
26. Other	-	-	-	-	-	-	-	-
27. TRANSFERS	-	-	-	-	-	-	-	-
28. CONSUMPTION OF THE ENERGY SECTOR	-	-	-	-	-	-	-	-
29. Coal mining and preparation	-	-	-	-	-	-	-	-
30. Hydrocarbons extraction and annexed services	-	-	-	-	-	-	-	-
31. Radioactive ores quarrying	-	-	-	-	-	-	-	-
32. Crude oil processing, coal coking and nuclear fuel treatment	-	-	-	-	-	-	-	-
33. Electric and thermal energy production, transport and distribution	-	-	-	-	-	-	-	-
34. Losses	14706	13803	9659	404428	8074	7267	5085	212923
35. AVAILABLE FOR FINAL CONSUMPTION	518995	487113	340877	14272411	1680201	1512181	1058209	44306905
36. Non-energy consumption	-	-	-	-	68612	61751	43213	1809304
37. FINAL ENERGY CONSUMPTION	32	30	21	879	1697428	1527684	1069057	44761142
38. Industry	-	-	-	-	1697303	1527572	1068979	44757860
39. Mining of metal ores	-	-	-	-	-	-	-	-
40. Other mining and quarrying	-	-	-	-	-	-	-	-
41. Food, beverages and tobacco	-	-	-	-	2908	2617	1831	76678
42. Textile and textile products	-	-	-	-	-	-	-	-
43. Textile fur and leather wearing apparel	-	-	-	-	-	-	-	-
44. Leather goods and foot wear	-	-	-	-	-	-	-	-
45. Wood and products of wood	-	-	-	-	-	-	-	-
46. Pulp, paper and paper products	-	-	-	-	-	-	-	-
47. Publishing, printing and reproduction of recorded media	-	-	-	-	-	-	-	-
48. Chemistry and chemical products	-	-	-	-	15416	13874	9709	406508
49. Rubber and plastic products	-	-	-	-	-	-	-	-
50. Other non-metallic mineral products	-	-	-	-	6159	5543	3879	162410
51. Metallurgy	-	-	-	-	1671634	1504471	1052814	44081000
52. Metal products, machinery and equipment	-	-	-	-	1180	1062	743	31117
53. Furniture and other unclassified activities	-	-	-	-	-	-	-	-
54. Waste recovering	-	-	-	-	-	-	-	-
55. Water collection, treatment and distribution	-	-	-	-	-	-	-	-
56. Construction	-	-	-	-	6	5	3	147
57. Transport	-	-	-	-	69	62	43	1817
58. Households	32	30	21	879	-	-	-	-
59. Agriculture and Forestry	-	-	-	-	56	50	35	1465
60. Other economic activities	-	-	-	-	-	-	-	-
61. Statistical difference	518963	487083	340856	14271532	-85839	-77254	-54061	-2263541

	Firewood (including biomass)				Crude oil(including natural gas liquids)			
	tonnes	tce	toe	GJ	tonnes	tce	toe	GJ
1.Primary production (recovered products included)	13282832	4613854	3228729	135185922	5436681	7611041	5326131	223003502
2. Imports	-	-	-	-	8688818	12412585	8686204	363688741
3. Opening stock	428437	145854	102067	4273522	879285	1243754	870367	36441992
4. TOTAL RESOURCES	13711269	4759708	3330796	139459444	15004784	21267380	14882702	623134235
5. Exports	-	-	-	-	-	-	-	-
6. Bunkers	-	-	-	-	-	-	-	-
7. Closing stock	605939	208585	145966	6111541	813053	1150232	804921	33701798
8. GROSS INLAND CONSUMPTION	13105330	4551123	3184830	133347903	14109338	19997942	14077781	589432437
9. Transformation input	84309	27969	19572	819492	14191731	20117148	13994361	585939700
10. Conventional thermal power stations	15000	4740	3317	138882	-	-	-	-
11. Nuclear power stations	-	-	-	-	-	-	-	-
12. Heat plants	69309	23229	16255	680610	-	-	-	-
13. Patent fuel plants	-	-	-	-	-	-	-	-
14. Coke-oven plants	-	-	-	-	-	-	-	-
15. Blast-furnace plants	-	-	-	-	-	-	-	-
16. Refineries	-	-	-	-	14109338	19997942	13994361	585939700
17. Other	-	-	-	-	-	-	-	-
18. Transformation output	-	-	-	-	-	-	-	-
19. Conventional thermal power stations	-	-	-	-	-	-	-	-
20. Nuclear power stations	-	-	-	-	-	-	-	-
21. Heat plants	-	-	-	-	-	-	-	-
22. Patent fuel plants	-	-	-	-	-	-	-	-
23. Coke-oven plants	-	-	-	-	-	-	-	-
24. Blast-furnace plants	-	-	-	-	-	-	-	-
25. Refineries	-	-	-	-	-	-	-	-
26. Other	-	-	-	-	-	-	-	-
27. TRANSFERS	-	-	-	-	-	-	-	-
28. CONSUMPTION OF THE ENERGY SECTOR	26717	8662	6062	253796	42312	59786	41838	1751730
29. Coal mining and preparation	289	101	71	2959	-	-	-	-
30. Hydrocarbons extraction and annexed services	165	58	41	1699	42312	59786	41838	1751730
31. Radioactive ores quarrying	-	-	-	-	-	-	-	-
32. Crude oil processing, coal coking and nuclear fuel treatment	6658	2104	1472	61647	-	-	-	-
33. Electric and thermal energy production, transport and distribution	19605	6399	4478	187491	-	-	-	-
34. Losses	257	90	63	2637	74273	106460	74499	3119278
35. AVAILABLE FOR FINAL CONSUMPTION	12994047	4514402	3159133	132271978	-34192	-47040	-32917	-1378271
36. Non-energy consumption	-	-	-	-	-	-	-	-
37. FINAL ENERGY CONSUMPTION	13003027	4525456	3166868	132595865	276	390	273	11427
38. Industry	1074653	350842	245515	10279674	-	-	-	-
39. Mining of metal ores	1318	462	323	13537	-	-	-	-
40. Other mining and quarrying	369	129	91	3779	-	-	-	-
41. Food, beverages and tobacco	73590	23489	16438	688228	-	-	-	-
42. Textile and textile products	83688	26515	18555	776889	-	-	-	-
43. Textile fur and leather wearing apparel	3921	1372	960	40200	-	-	-	-
44. Leather goods and foot wear	262	92	64	2696	-	-	-	-
45. Wood and products of wood	259868	86802	60743	2543299	-	-	-	-
46. Pulp, paper and paper products	421234	135141	94571	3959632	-	-	-	-
47. Publishing, printing and reproduction of recorded media	-	-	-	-	-	-	-	-
48. Chemistry and chemical products	352	122	85	3575	-	-	-	-
49. Rubber and plastic products	328	115	80	3370	-	-	-	-
50. Other non-metallic mineral products	55353	17583	12304	515182	-	-	-	-
51. Metallurgy	7	2	1	59	-	-	-	-
52. Metal products, machinery and equipment	3751	1303	912	38178	-	-	-	-
53. Furniture and other unclassified activities	153008	51824	36266	1518444	-	-	-	-
54. Waste recovering	166	58	41	1699	-	-	-	-
55. Water collection, treatment and distribution	2143	749	524	21946	-	-	-	-
56. Construction	15295	5084	3557	148961	-	-	-	-
57. Transport	2771	967	677	28333	-	-	-	-
58. Households	11155037	3904263	2732164	114394906	-	-	-	-
59. Agriculture and Forestry	11179	3892	2723	114036	-	-	-	-
60. Other economic activities	75938	265492	185789	7778916	276	390	273	11427
61. Statistical difference	-8980	-11054	-7735	-323887	-34468	-47430	-33190	-1389698

	Gasoline				Kerosene			
	tonnes	tce	toe	GJ	tonnes	tce	toe	GJ
1. Primary production (recovered products included)	-	-	-	-	-	-	-	-
2. Imports	62440	93661	65542	2744268	23160	34176	23916	1001357
3. Opening stock	208374	310068	216982	9084993	6061	9735	6813	285236
4. TOTAL RESOURCES	270814	403729	282524	11829261	29221	43911	30729	1286593
5. Exports	2832347	4208369	2944975	123305212	127808	208253	145733	6101813
6. Bunkers	-	-	-	-	-	-	-	-
7. Closing stock	208069	309666	216700	9073214	4721	7497	5247	219663
8. GROSS INLAND CONSUMPTION	-2769602	-4114306	-2879151	-120549165	-103308	-171839	-120251	-5034883
9. Transformation input	150	221	155	6475	28	41	29	1201
10. Conventional thermal power stations	105	155	109	4541	1	1	1	29
11. Nuclear power stations	-	-	-	-	-	-	-	-
12. Heat plants	45	66	46	1934	27	40	28	1172
13. Patent fuel plants	-	-	-	-	-	-	-	-
14. Coke-oven plants	-	-	-	-	-	-	-	-
15. Blast-furnace plants	-	-	-	-	-	-	-	-
16. Refineries	-	-	-	-	-	-	-	-
17. Other	-	-	-	-	-	-	-	-
18. Transformation output	4744715	7053537	4935995	206668634	293698	473802	331562	13882400
19. Conventional thermal power stations	-	-	-	-	-	-	-	-
20. Nuclear power stations	-	-	-	-	-	-	-	-
21. Heat plants	-	-	-	-	-	-	-	-
22. Patent fuel plants	-	-	-	-	-	-	-	-
23. Coke-oven plants	-	-	-	-	-	-	-	-
24. Blast-furnace plants	-	-	-	-	-	-	-	-
25. Refineries	4744715	7053537	4935995	206668634	293698	473802	331562	13882400
26. Other	-	-	-	-	-	-	-	-
27. TRANSFERS	-	-	-	-	-	-	-	-
28. CONSUMPTION OF THE ENERGY SECTOR	4598	6829	4778	200090	274	428	300	12540
29. Coal mining and preparation	14	20	14	586	1	1	1	29
30. Hydrocarbons extraction and annexed services	3421	5081	3555	148873	83	122	85	3575
31. Radioactive ores quarrying	-	-	-	-	-	-	-	-
32. Crude oil processing, coal coking and nuclear fuel treatment	-	-	-	-	27	41	29	1201
33. Electric and thermal energy production, transport and distribution	1163	1728	1209	50631	163	264	185	7735
34. Losses	2501	3715	2600	108849	-	-	-	-
35. AVAILABLE FOR FINAL CONSUMPTION	1967864	2928466	2049311	85804055	190088	301494	210982	8833776
36. Non-energy consumption	344460	516690	361575	15139017	578	862	603	25257
37. FINAL ENERGY CONSUMPTION	1719384	2554067	1787309	74834168	93250	153119	107150	4486388
38. Industry	53626	79653	55739	2333837	5126	7964	5572	233346
39. Mining of metal ores	62	92	64	2696	-	-	-	-
40. Other mining and quarrying	177	263	184	7706	1	2	1	59
41. Food, beverages and tobacco	2960	4404	3082	129038	-	-	-	-
42. Textile and textile products	283	420	294	12306	1	1	1	29
43. Textile fur and leather wearing apparel	481	714	499	20921	84	123	86	3604
44. Leather goods and foot wear	552	820	574	24026	2	3	2	88
45. Wood and products of wood	315	467	327	13683	-	-	-	-
46. Pulp, paper and paper products	-	-	-	-	6	9	6	264
47. Publishing, printing and reproduction of recorded media	-	-	-	-	6	9	6	264
48. Chemistry and chemical products	2259	3355	2348	98301	2278	3417	2391	100118
49. Rubber and plastic products	500	745	521	21829	65	97	68	2842
50. Other non-metallic mineral products	814	1209	846	35424	22	33	23	1846
51. Metallurgy	-	-	-	-	43	63	44	967
52. Metal products, machinery and equipment	6010	8929	6249	261620	2247	3662	2563	107296
53. Furniture and other unclassified activities	700	1039	727	30443	7	11	8	322
54. Waste recovering	28	42	29	1231	-	-	-	-
55. Water collection, treatment and distribution	376	559	391	16379	-	-	-	-
56. Construction	38109	56595	39604	1658234	364	534	373	15647
57. Transport	1550052	2302383	1611185	67459822	82088	136276	95365	3992887
58. Households	11746	17619	12330	516237	5909	8669	6066	254002
59. Agriculture and Forestry	3053	4534	3172	132846	2	3	2	88
60. Other economic activities	100907	149878	104883	4391426	125	207	145	6065
61. Statistical difference	-95980	-142291	-99573	-4169130	96260	147513	103229	4322131

	Diesel Oil				Residual Fuel Oil			
	tonnes	tce	toe	GJ	tonnes	tce	toe	GJ
1. Primary production (recovered products included)	-	-	-	-	-	-	-	-
2. Imports	190914	276825	193719	8110973	334316	459515	321564	13463789
3. Opening stock	208409	302193	211472	8854255	616180	831754	582053	24370392
4. TOTAL RESOURCES	399323	579018	405191	16965228	950496	1291269	903617	37834181
5. Exports	1900196	2755284	1928120	80729821	726740	976865	683601	28622145
6. Bunkers	163766	-	-	-	-	-	-	-
7. Closing stock	-	237461	166173	6957607	494202	666906	466694	19540346
8. GROSS INLAND CONSUMPTION	-1664639	-2413727	-1689102	-70722200	-270446	-352502	-246678	-10328310
9. Transformation input	4518	6551	4585	191945	822510	1111462	777790	32565837
10. Conventional thermal power stations	1827	2649	1854	77616	353604	477788	334351	13999188
11. Nuclear power stations	-	-	-	-	-	-	-	-
12. Heat plants	2691	3902	2731	114329	468906	633674	443439	18566649
13. Patent fuel plants	-	-	-	-	-	-	-	-
14. Coke-oven plants	-	-	-	-	-	-	-	-
15. Blast-furnace plants	-	-	-	-	-	-	-	-
16. Refineries	-	-	-	-	-	-	-	-
17. Other	-	-	-	-	-	-	-	-
18. Transformation output	4541660	6585407	4608402	192952425	1706510	2291843	1603809	67151000
19. Conventional thermal power stations	-	-	-	-	-	-	-	-
20. Nuclear power stations	-	-	-	-	-	-	-	-
21. Heat plants	-	-	-	-	-	-	-	-
22. Patent fuel plants	-	-	-	-	-	-	-	-
23. Coke-oven plants	-	-	-	-	-	-	-	-
24. Blast-furnace plants	-	-	-	-	-	-	-	-
25. Refineries	4541660	6585407	4608402	192952425	1706510	2291843	1603809	67151000
26. Other	-	-	-	-	-	-	-	-
27. TRANSFERS	-	-	-	-	-	-	-	-
28. CONSUMPTION OF THE ENERGY SECTOR	55977	81167	56800	2378193	273227	369190	258355	10817267
29. Coal mining and preparation	2988	4333	3032	126957	-	-	-	-
30. Hydrocarbons extraction and annexed services	46970	68107	47661	1995535	96412	130429	91273	3821570
31. Radioactive ores quarrying	-	-	-	-	-	-	-	-
32. Crude oil processing, coal coking and nuclear fuel treatment	3718	5391	3773	157956	156141	210851	147551	6177934
33. Electric and thermal energy production, transport and distribution	2301	3336	2334	97745	20674	27910	19531	817763
34. Losses	9533	13823	9673	405014	195	264	185	7735
35. AVAILABLE FOR FINAL CONSUMPTION	2806993	4070139	2848242	119255073	340132	458425	320801	13431851
36. Non-energy consumption	24965	36199	25332	1060631	4243	5704	3992	167127
37. FINAL ENERGY CONSUMPTION	2809545	4073839	2850833	119363485	414571	560218	392034	16414388
38. Industry	303570	440176	308031	12897159	292988	395864	277021	11598816
39. Mining of metal ores	3148	4565	3195	133755	-	-	-	-
40. Other mining and quarrying	10189	14774	10339	432878	4918	6605	4622	193527
41. Food, beverages and tobacco	10212	14807	10362	433845	24370	32858	22994	962740
42. Textile and textile products	983	1425	997	41753	466	627	439	18371
43. Textile fur and leather wearing apparel	1461	2118	1482	62057	157	211	148	6182
44. Leather goods and foot wear	445	645	451	18899	-	-	-	-
45. Wood and products of wood	2477	3592	2514	105246	3167	4257	2979	124730
46. Pulp, paper and paper products	-	-	-	-	9752	13178	9222	386116
47. Publishing, printing and reproduction of recorded media	-	-	-	-	-	-	-	-
48. Chemistry and chemical products	2109	3058	2140	89599	8585	11558	8089	338650
49. Rubber and plastic products	2031	2945	2061	86289	3140	4230	2960	123939
50. Other non-metallic mineral products	7901	11456	8017	335661	21115	28447	19907	833497
51. Metallurgy	3739	5422	3794	158865	206582	279422	195536	8187064
52. Metal products, machinery and equipment	12889	18689	13078	547588	10347	13948	9760	408676
53. Furniture and other unclassified activities	1806	2619	1833	76737	-	-	-	-
54. Waste recovering	1860	2697	1887	79022	-	-	-	-
55. Water collection, treatment and distribution	66157	95928	67129	2810690	26	35	24	1026
56. Construction	176163	255436	178752	7484275	363	488	341	14298
57. Transport	2229912	3233372	2262682	94737800	12361	16601	11617	486409
58. Households	-	-	-	-	108577	146886	102789	4303760
59. Agriculture and Forestry	107971	156558	109558	4587149	222	298	209	8731
60. Other economic activities	168092	243733	170562	7141377	423	569	398	16672
61. Statistical difference	-27517	-39899	-27923	-1169043	-78682	-107497	-75225	-3149664

	Refinery Gas				LPG			
	tonnes	tce	toe	GJ	tonnes	tce	toe	GJ
1. Primary production (recovered products included)	-	-	-	-	-	-	-	-
2. Imports	5986	9834	6882	288136	58116	95476	66813	2797447
3. Opening stock	5708	9378	6563	274775	9800	16101	11267	471759
4. TOTAL RESOURCES	11694	19212	13445	562911	67916	111577	78080	3269206
5. Exports	152324	250268	175135	7332852	75177	123515	86435	3618990
6. Bunkers	-	-	-	-	-	-	-	-
7. Closing stock	-	-	-	-	8348	13716	9598	401879
8. GROSS INLAND CONSUMPTION	-140630	-231056	-161690	-6769941	-15609	-25654	-17953	-751663
9. Transformation input	12361	20309	14212	595054	383	629	440	18430
10. Conventional thermal power stations	9156	15043	10527	440760	-	-	-	-
11. Nuclear power stations	-	-	-	-	-	-	-	-
12. Heat plants	3205	5266	3685	154294	383	629	440	18430
13. Patent fuel plants	-	-	-	-	-	-	-	-
14. Coke-oven plants	-	-	-	-	-	-	-	-
15. Blast-furnace plants	-	-	-	-	-	-	-	-
16. Refineries	-	-	-	-	-	-	-	-
17. Other	-	-	-	-	-	-	-	-
18. Transformation output	1082123	1777928	1244176	52093290	657580	1080404	756056	31655837
19. Conventional thermal power stations	-	-	-	-	-	-	-	-
20. Nuclear power stations	-	-	-	-	-	-	-	-
21. Heat plants	-	-	-	-	-	-	-	-
22. Patent fuel plants	-	-	-	-	-	-	-	-
23. Coke-oven plants	-	-	-	-	-	-	-	-
24. Blast-furnace plants	-	-	-	-	-	-	-	-
25. Refineries	1082123	1777928	1244176	52093290	657580	1080404	756056	31655837
26. Other	-	-	-	-	-	-	-	-
27. TRANSFERS	-	-	-	-	-	-	-	-
28. CONSUMPTION OF THE ENERGY SECTOR	559768	919699	643596	26947181	178	293	205	8585
29. Coal mining and preparation	-	-	-	-	34	56	39	1641
30. Hydrocarbons extraction and annexed services	29841	49029	34310	1436550	4	7	5	205
31. Radioactive ores quarrying	-	-	-	-	-	-	-	-
32. Crude oil processing, coal coking and nuclear fuel treatment	529540	870034	608841	25491996	-	-	-	-
33. Electric and thermal energy production, transport and distribution	387	636	445	18635	140	230	161	6739
34. Losses	2724	4476	3132	131147	-	-	-	-
35. AVAILABLE FOR FINAL CONSUMPTION	366640	602388	421546	17649967	641410	1053828	737458	30877159
36. Non-energy consumption	295263	485117	339480	14213928	-	-	-	-
37. FINAL ENERGY CONSUMPTION	226074	371440	259930	10883193	362297	595250	416551	17440825
38. Industry	220833	362829	253904	10630890	33580	55171	38608	1616510
39. Mining of metal ores	-	-	-	-	14	23	16	674
40. Other mining and quarrying	-	-	-	-	14	23	16	674
41. Food, beverages and tobacco	1	2	1	59	8393	13790	9650	404047
42. Textile and textile products	-	-	-	-	599	984	689	28831
43. Textile fur and leather wearing apparel	-	-	-	-	759	1247	873	36537
44. Leather goods and foot wear	-	-	-	-	3248	5336	3734	156345
45. Wood and products of wood	-	-	-	-	2	3	2	88
46. Pulp, paper and paper products	-	-	-	-	95	156	109	4571
47. Publishing, printing and reproduction of recorded media	-	-	-	-	3	5	3	147
48. Chemistry and chemical products	220832	362827	253903	10630831	735	1208	845	35394
49. Rubber and plastic products	-	-	-	-	555	912	638	26722
50. Other non-metallic mineral products	-	-	-	-	12	20	14	586
51. Metallurgy	-	-	-	-	69	113	79	3311
52. Metal products, machinery and equipment	-	-	-	-	12598	20698	14484	606451
53. Furniture and other unclassified activities	-	-	-	-	31	51	36	1494
54. Waste recovering	-	-	-	-	25	41	29	1201
55. Water collection, treatment and distribution	-	-	-	-	25	41	29	1201
56. Construction	-	-	-	-	6403	10520	7362	308236
57. Transport	42	69	48	2022	47750	78453	54901	2298673
58. Households	5199	8542	5978	250281	200503	329424	230528	9652123
59. Agriculture and Forestry	-	-	-	-	1014	1666	1166	48814
60. Other economic activities	-	-	-	-	79450	130536	91348	3824705
61. Statistical difference	-154697	-254169	-177864	-7447154	279113	458578	320907	13436334

	Other Oil Product				Natural Gas			
	tonnes	tce	toe	GJ	th cm 15C	tce	toe	GJ
1. Primary production (recovered products included)	-	-	-	-	11961962	13627642	9536488	399289907
2. Imports	415311	495396	346673	14515103	5259357	1485278	4232513	177214047
3. Opening stock	286771	371556	260011	10886591	1299990	6048261	1039383	43518645
4. TOTAL RESOURCES	702082	866952	606684	25401694	18521309	21161181	14808384	620022599
5. Exports	119576	140156	98079	4106571	-	-	-	-
6. Bunkers	-	-	-	-	-	-	-	-
7. Closing stock	336696	440542	308287	12907882	1236273	1412479	988439	41385635
8. GROSS INLAND CONSUMPTION	245810	286254	200318	8387241	17285036	19748702	13819945	578636964
9. Transformation input	42873	58610	41014	1717274	5057154	5777950	4043352	169293935
10. Conventional thermal power stations	2	3	2	88	2505704	2862842	2003388	83881271
11. Nuclear power stations	-	-	-	-	-	-	-	-
12. Heat plants	42871	58607	41012	1717186	2551450	2915108	2039964	85412664
13. Patent fuel plants	-	-	-	-	-	-	-	-
14. Coke-oven plants	-	-	-	-	-	-	-	-
15. Blast-furnace plants	-	-	-	-	-	-	-	-
16. Refineries	-	-	-	-	-	-	-	-
17. Other	-	-	-	-	-	-	-	-
18. Transformation output	1840696	2364645	1654755	69284100	-	-	-	-
19. Conventional thermal power stations	-	-	-	-	-	-	-	-
20. Nuclear power stations	-	-	-	-	-	-	-	-
21. Heat plants	-	-	-	-	-	-	-	-
22. Patent fuel plants	-	-	-	-	-	-	-	-
23. Coke-oven plants	-	-	-	-	-	-	-	-
24. Blast-furnace plants	-	-	-	-	-	-	-	-
25. Refineries	1840696	2364645	1654755	69284100	-	-	-	-
26. Other	-	-	-	-	-	-	-	-
27. TRANSFERS	-	-	-	-	-	-	-	-
28. CONSUMPTION OF THE ENERGY SECTOR	736060	965498	675647	28289092	1310932	1497778	1048131	43884896
29. Coal mining and preparation	203	275	192	8058	1867	2133	1493	62497
30. Hydrocarbons extraction and annexed services	195563	246584	172558	7224911	844926	965353	675544	227339
31. Radioactive ores quarrying	30	41	29	1201	6791	7759	5430	28284843
32. Crude oil processing, coal coking and nuclear fuel treatment	538485	716182	501177	20984133	371869	424871	297321	12448720
33. Electric and thermal energy production, transport and distribution	1779	2416	1691	70789	85479	97662	68343	2861497
34. Losses	44566	66773	46727	1956449	719043	821528	574897	24070770
35. AVAILABLE FOR FINAL CONSUMPTION	1263007	1560018	1091685	45708526	10197907	11651446	8153565	341387363
36. Non-energy consumption	297521	355812	248994	10425291	1510246	1725501	1207488	50557179
37. FINAL ENERGY CONSUMPTION	968265	1176395	823232	34468377	9504059	10858674	7598794	318159148
38. Industry	836791	1008039	705418	29535544	5235590	5981819	4186019	175267296
39. Mining of metal ores	762	1034	724	30296	2307	2636	1845	77235
40. Other mining and quarrying	1189	1613	1129	47261	7802	8914	6238	261180
41. Food, beverages and tobacco	26528	36033	25215	1055768	746698	853125	597008	24996563
42. Textile and textile products	1282	1740	1218	50982	69560	79474	55615	2328588
43. Textile fur and leather wearing apparel	1725	2343	1640	68649	47041	53746	37611	1574758
44. Leather goods and foot wear	213	302	211	8849	7368	8418	5891	246647
45. Wood and products of wood	10	13	9	381	88914	101587	71090	2976499
46. Pulp, paper and paper products	-	-	-	-	96995	110820	77551	3247026
47. Publishing, printing and reproduction of recorded media	35	47	33	1377	42293	48321	33815	1415805
48. Chemistry and chemical products	54419	81524	57050	2388654	1944423	2221562	1554627	65091767
49. Rubber and plastic products	576	800	559	23441	137981	157647	110320	4619057
50. Other non-metallic mineral products	636132	745055	521382	21830112	667819	763003	533942	22355988
51. Metallurgy	92347	108271	75767	3172340	818360	935001	654304	27395529
52. Metal products, machinery and equipment	3375	4560	3192	133608	395152	451473	315936	13228159
53. Furniture and other unclassified activities	141	196	138	5742	36548	41757	29221	1223480
54. Waste recovering	69	94	66	2754	756	864	605	25315
55. Water collection, treatment and distribution	209	279	195	8175	12960	14807	10362	433845
56. Construction	17779	24135	16890	707155	112613	128664	90038	3769855
57. Transport	12717	17232	12059	504898	42040	48032	33612	1407338
58. Households	67380	81676	57155	2393108	3197128	3652815	2556204	107027480
59. Agriculture and Forestry	2859	3609	2526	105744	45820	52351	36635	1533884
60. Other economic activities	48518	65839	46074	1929083	983481	1123657	786324	32923150
61. Statistical difference	-2779	27811	19459	814858	-816398	-932729	-652717	-27328964

	Coke Gas				Furnace Gas			
	th cm 15C	tce	toe	GJ	th cm 15C	tce	toe	GJ
1. Primary production (recovered products included)	-	-	-	-	-	-	-	-
2. Imports	-	-	-	-	-	-	-	-
3. Opening stock	-	-	-	-	-	-	-	-
4. TOTAL RESOURCES	-	-	-	-	-	-	-	-
5. Exports	-	-	-	-	-	-	-	-
6. Bunkers	-	-	-	-	-	-	-	-
7. Closing stock	-	-	-	-	-	-	-	-
8. GROSS INLAND CONSUMPTION	-	-	-	-	-	-	-	-
9. Transformation input	71337	36800	25753	1078240	656244	74372	52045	2179099
10. Conventional thermal power stations	47482	24494	17141	717674	578142	65521	45851	1919765
11. Nuclear power stations	-	-	-	-	-	-	-	-
12. Heat plants	23855	12306	8612	360566	78102	8851	6194	259334
13. Patent fuel plants	-	-	-	-	-	-	-	-
14. Coke-oven plants	-	-	-	-	-	-	-	-
15. Blast-furnace plants	-	-	-	-	-	-	-	-
16. Refineries	-	-	-	-	-	-	-	-
17. Other	-	-	-	-	-	-	-	-
18. Transformation output	832931	429667	300677	12589243	7473126	846929	592672	24815020
19. Conventional thermal power stations	-	-	-	-	-	-	-	-
20. Nuclear power stations	-	-	-	-	-	-	-	-
21. Heat plants	-	-	-	-	-	-	-	-
22. Patent fuel plants	-	-	-	-	-	-	-	-
23. Coke-oven plants	832931	429667	300677	12589243	-	-	-	-
24. Blast-furnace plants	-	-	-	-	7473126	846929	592672	24815020
25. Refineries	-	-	-	-	-	-	-	-
26. Other	-	-	-	-	-	-	-	-
27. TRANSFERS	-	-	-	-	-	-	-	-
28. CONSUMPTION OF THE ENERGY SECTOR	427957	220762	154487	6468327	797140	90340	63219	2646962
29. Coal mining and preparation	-	-	-	-	-	-	-	-
30. Hydrocarbons extraction and annexed services	-	-	-	-	-	-	-	-
31. Radioactive ores quarrying	-	-	-	-	-	-	-	-
32. Crude oil processing, coal coking and nuclear fuel treatment	427957	220762	154487	6468327	465656	52773	36930	1546249
33. Electric and thermal energy production, transport and distribution	-	-	-	-	331484	37567	26289	1100713
34. Losses	21113	10891	7621	319106	325201	36855	25791	1079852
35. AVAILABLE FOR FINAL CONSUMPTION	312524	161214	112816	4723570	5694541	645362	451617	18909107
36. Non-energy consumption	-	-	-	-	-	-	-	-
37. FINAL ENERGY CONSUMPTION	370909	191333	133893	5606057	5637953	638950	447130	18721235
38. Industry	370850	191303	133872	5605178	5637938	638948	447129	18721176
39. Mining of metal ores	-	-	-	-	-	-	-	-
40. Other mining and quarrying	-	-	-	-	-	-	-	-
41. Food, beverages and tobacco	-	-	-	-	-	-	-	-
42. Textile and textile products	-	-	-	-	-	-	-	-
43. Textile fur and leather wearing apparel	-	-	-	-	-	-	-	-
44. Leather goods and foot wear	-	-	-	-	-	-	-	-
45. Wood and products of wood	-	-	-	-	-	-	-	-
46. Pulp, paper and paper products	-	-	-	-	-	-	-	-
47. Publishing, printing and reproduction of recorded media	-	-	-	-	-	-	-	-
48. Chemistry and chemical products	-	-	-	-	-	-	-	-
49. Rubber and plastic products	-	-	-	-	-	-	-	-
50. Other non-metallic mineral products	-	-	-	-	43409	4920	3443	144156
51. Metallurgy	365302	188441	131869	5521321	5594529	634028	443686	18577020
52. Metal products, machinery and equipment	5548	2862	2003	83857	-	-	-	-
53. Furniture and other unclassified activities	-	-	-	-	-	-	-	-
54. Waste recovering	-	-	-	-	-	-	-	-
55. Water collection, treatment and distribution	-	-	-	-	-	-	-	-
56. Construction	-	-	-	-	-	-	-	-
57. Transport	-	-	-	-	-	-	-	-
58. Households	-	-	-	-	-	-	-	-
59. Agriculture and Forestry	-	-	-	-	-	-	-	-
60. Other economic activities	59	30	21	879	15	2	1	59
61. Statistical difference	-58385	-30119	-21077	-882487	56588	6412	4487	187872