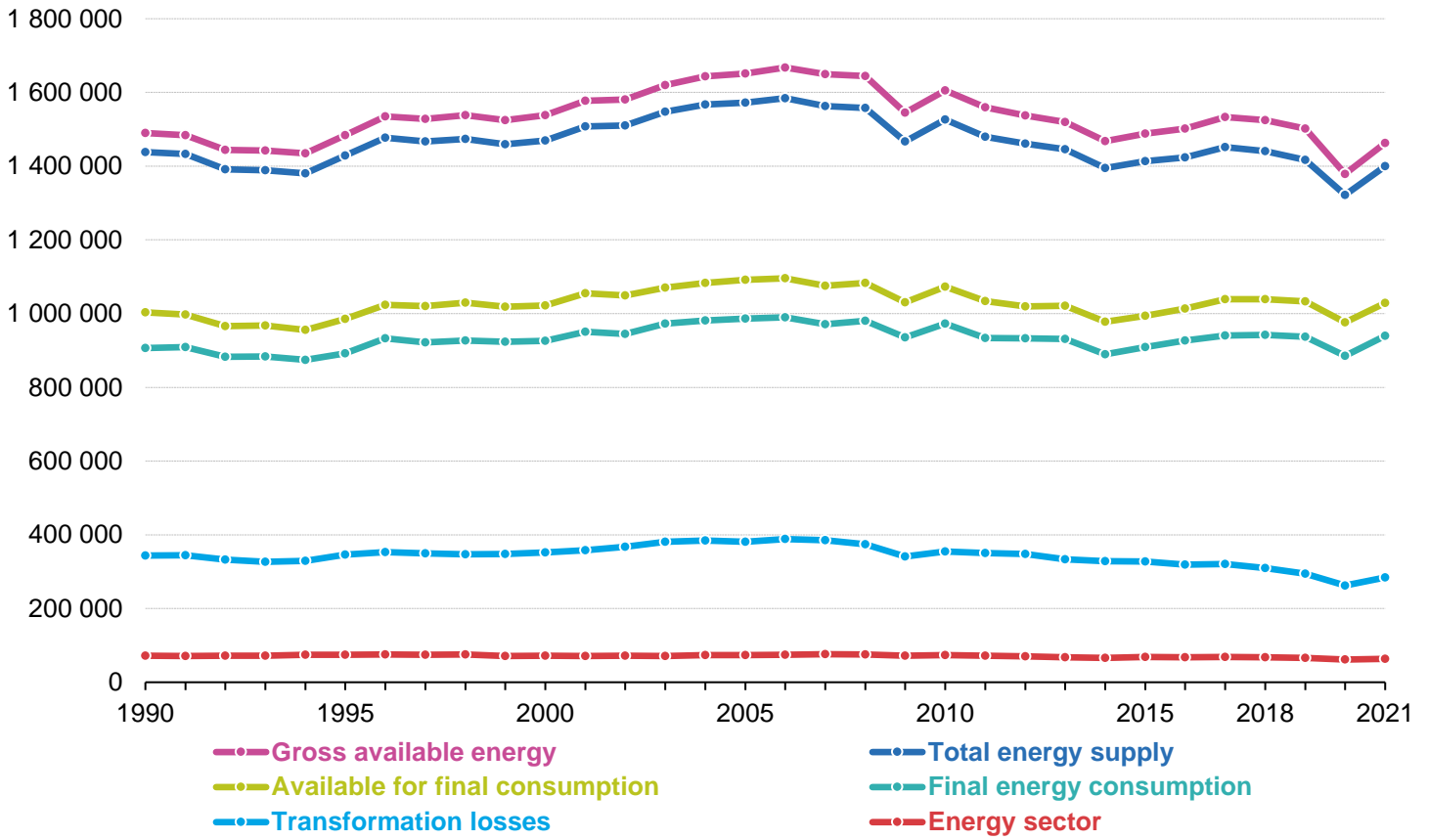
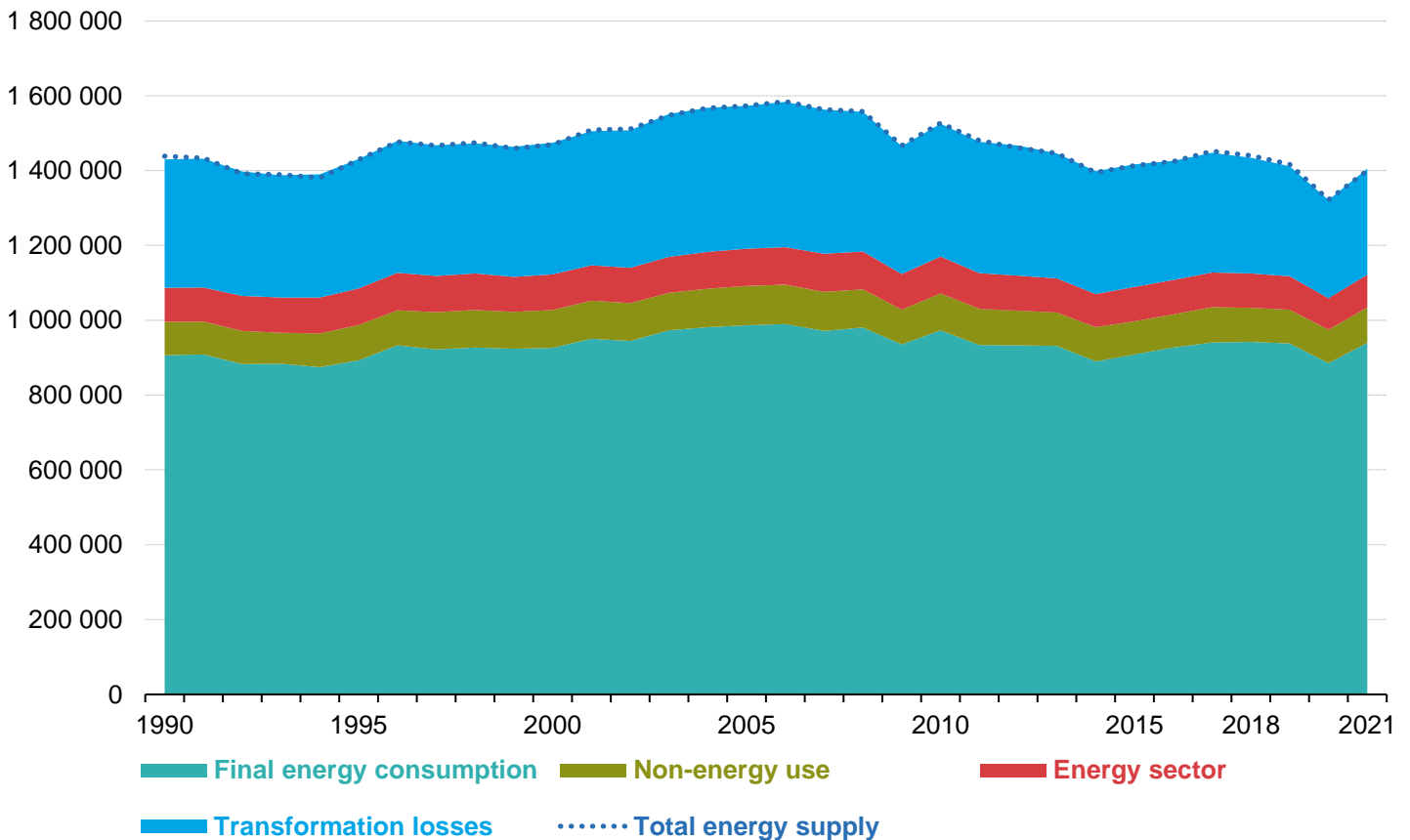


# European Union (27 countries)

## Key energy balance aggregates, ktoe



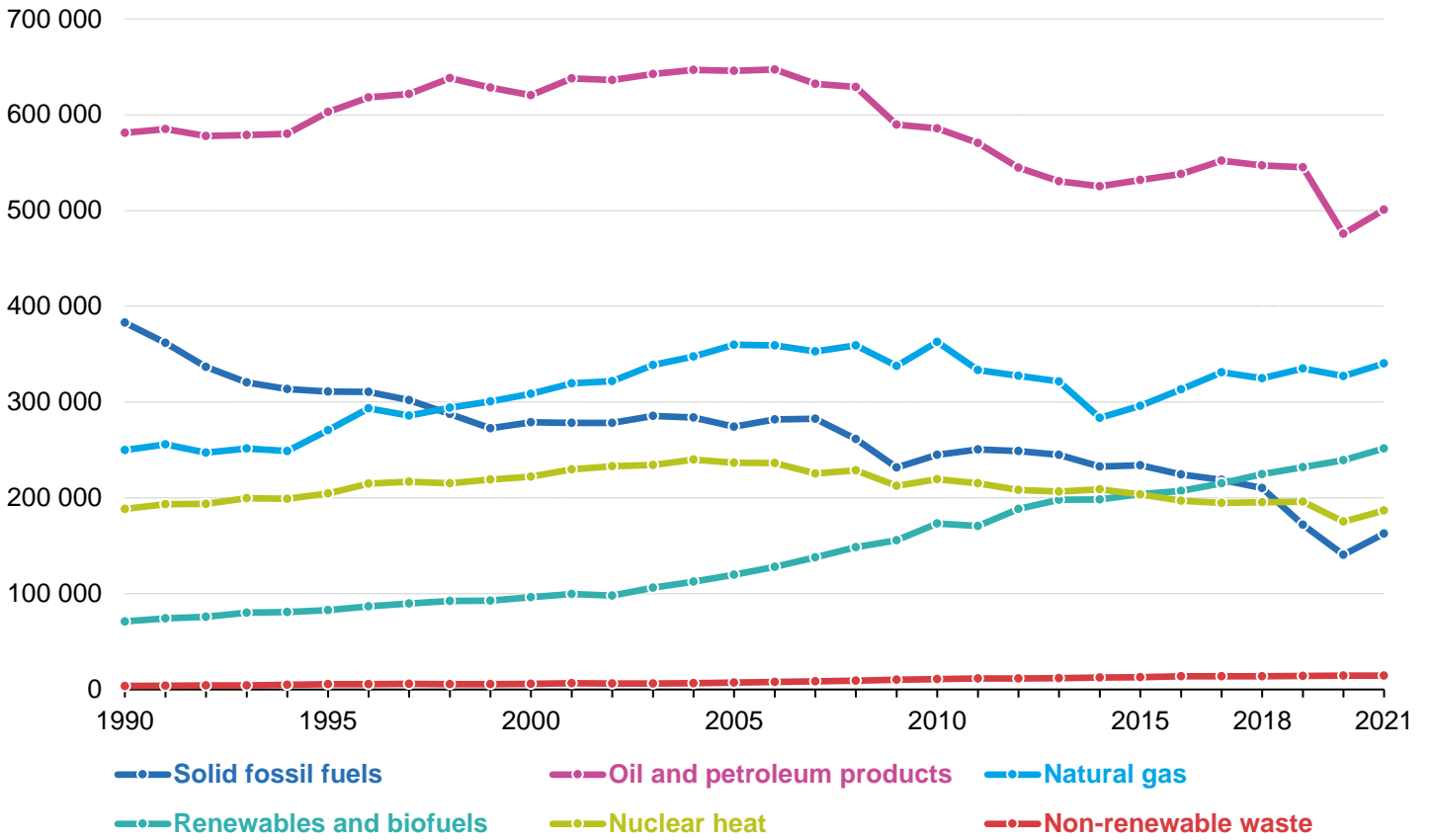
## Total energy supply and its components, ktoe



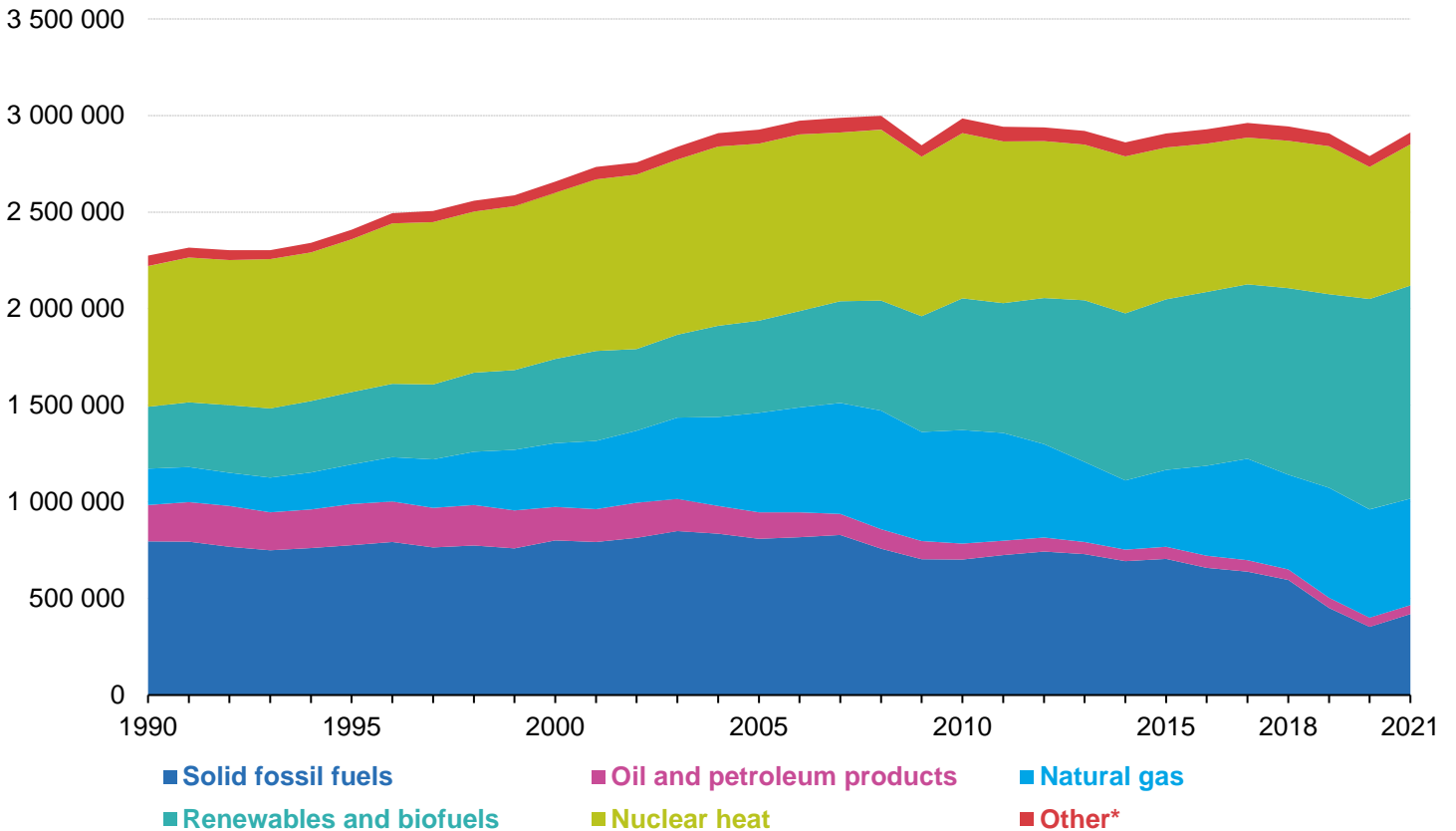
The difference between *Total energy supply* and the area chart is the *Statistical difference*.

# European Union (27 countries)

## Gross available energy by fuel, ktoe



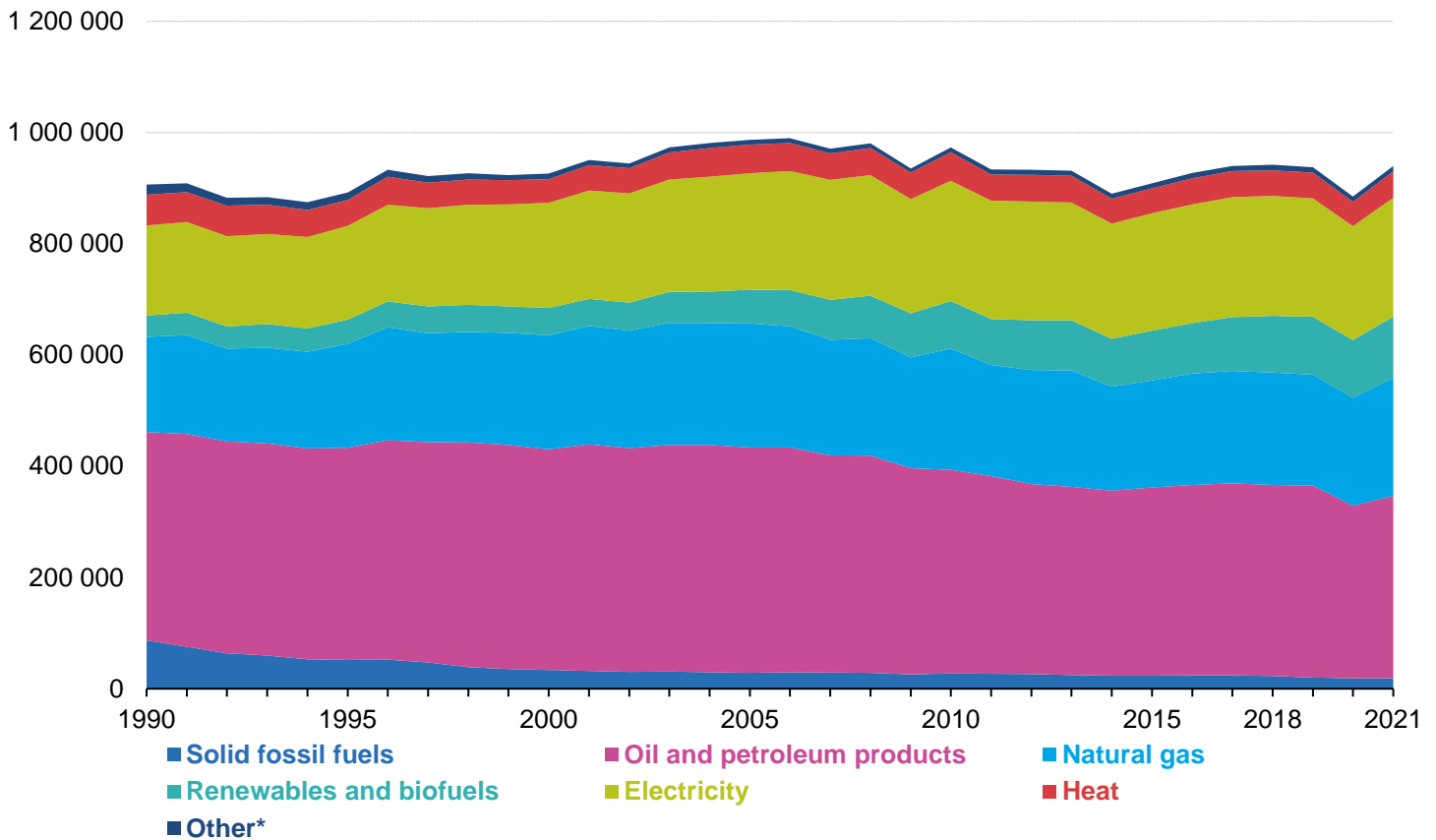
## Gross electricity production by fuel, GWh



\*Other includes peat and peat products, oil shale and oil sands, manufactured gases, non-renewable waste, derived heat, chemical heat and non-specified sources.

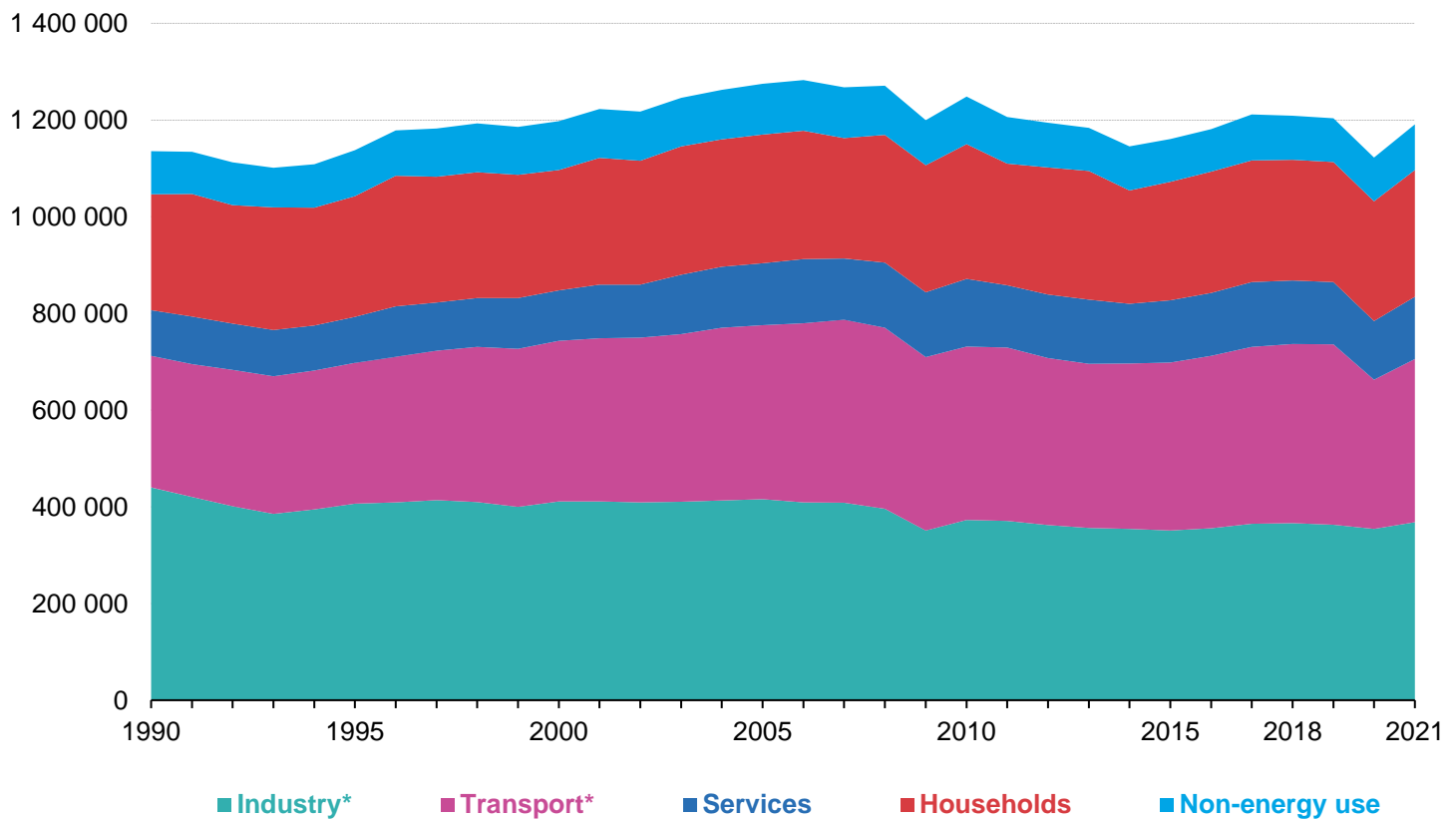
# European Union (27 countries)

## Final energy consumption by fuel, ktoe



\*Other includes peat and peat products, oil shale and oil sands, manufactured gases and non-renewable waste.

## Consumption by sector, ktoe



\* Industry includes agriculture, forestry, fishing and other non-specified.

\* Transport includes international maritime and aviation bunkers.

European Union (27 countries)	ktoe									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	
<b>Gross available energy</b>	1 519 986	1 468 052	1 488 482	1 501 710	1 532 987	1 524 747	1 501 402	1 379 096	1 462 427	
Solid fossil fuels	244 923	232 764	234 079	224 584	218 777	210 423	171 995	140 629	162 756	
Peat & peat products	2 062	2 345	2 343	2 333	2 177	2 364	2 304	1 742	1 370	
Oil shale & oil sands	4 098	3 932	3 181	4 222	4 349	4 174	3 047	2 493	2 726	
Crude oil & other hydrocarbons	498 742	501 245	532 333	532 948	544 706	536 610	526 252	460 294	471 847	
Petroleum products	530 433	525 346	531 856	538 003	552 068	547 114	545 127	475 766	500 746	
Natural gas	321 384	283 521	296 082	313 355	331 046	324 894	335 200	327 175	340 292	
Nuclear heat	206 514	208 966	203 782	197 053	194 899	195 248	196 181	175 176	186 663	
Renewable energies	197 961	198 234	203 974	207 259	215 103	224 782	232 057	239 441	251 633	
Non-renewable wastes	11 945	12 505	12 758	13 756	13 828	13 908	14 147	14 363	14 495	
<b>Primary production</b>	689 728	673 095	657 243	641 422	639 862	636 626	617 634	572 952	597 596	
Solid fossil fuels	140 810	135 227	133 781	124 669	122 629	116 090	100 066	83 590	90 966	
Peat	3 306	2 815	1 769	1 560	1 604	2 866	1 574	780	448	
Oil shale and oil sands	4 112	4 014	3 515	3 716	4 293	4 282	3 178	2 517	2 428	
Crude oil & other hydrocarbons	26 680	26 481	25 480	22 377	22 060	21 388	19 797	18 765	17 630	
Natural gas	99 461	85 867	72 379	71 436	66 614	59 324	52 165	41 207	37 964	
Nuclear heat	206 514	208 966	203 782	197 053	194 899	195 248	196 181	175 176	186 663	
Renewable energies	193 665	194 173	200 386	203 332	210 263	219 754	227 024	233 330	243 971	
Non-renewable wastes	11 645	12 161	12 362	13 317	13 372	13 461	13 685	13 921	13 933	
<b>Net imports</b>	819 860	798 925	834 497	843 367	882 210	886 434	908 073	792 357	811 980	
Solid fossil fuels	95 616	96 573	95 965	92 304	94 611	92 073	74 412	50 300	60 953	
Crude oil	473 787	474 011	511 069	507 587	521 344	513 842	509 199	441 927	449 236	
Gas/Diesel Oil (w/o bio)	18 660	13 390	14 925	16 237	12 292	17 512	24 189	22 819	13 299	
Motor Gasoline (w/o bio)	-41 055	-42 550	-48 884	-47 952	-49 758	-53 229	-52 554	-44 142	-49 756	
Naphtha	11 442	13 711	12 148	10 940	14 829	15 710	17 937	19 116	23 766	
LPG	11 797	14 021	13 720	13 671	13 179	14 723	14 771	13 799	13 269	
All other oil & petroleum products	500 309	494 270	514 552	509 500	517 738	517 151	527 284	460 431	459 045	
Natural gas	219 439	203 890	220 558	237 185	265 361	270 501	300 549	273 512	283 818	
<b>Transformation input</b>	1 344 175	1 340 332	1 373 104	1 368 406	1 390 675	1 374 312	1 351 151	1 224 687	1 290 753	
Electricity & heat generation	618 297	603 986	608 191	603 565	606 795	594 360	576 071	535 150	566 253	
Refinery intake	553 522	556 553	583 649	583 277	594 919	587 310	577 317	509 068	525 484	
Coke ovens	35 329	35 026	34 897	35 145	35 073	34 964	32 709	28 540	29 337	
Blast furnaces	29 821	30 698	29 947	29 898	30 618	30 282	28 709	24 343	31 165	
<b>Transformation output</b>	1 010 565	1 011 789	1 045 310	1 049 683	1 070 295	1 064 509	1 056 762	962 123	1 006 890	
Electricity & heat generation	310 406	300 895	305 696	309 850	312 840	309 894	305 995	293 746	308 687	
Refinery output	548 771	552 701	579 254	579 318	590 206	583 712	572 813	504 678	520 974	
Coke ovens	32 696	32 392	32 561	32 650	32 564	31 903	30 100	26 464	27 788	
Blast furnaces	11 764	12 204	12 135	11 910	12 253	12 746	12 027	10 095	11 460	
<b>Energy sector</b>	67 589	66 093	68 452	68 111	68 601	67 745	66 057	61 609	63 145	
<b>Distribution losses</b>	23 673	22 613	23 473	23 777	23 506	23 511	22 866	21 963	24 059	
<b>Available for final consumption</b>	1 021 327	977 795	993 883	1 013 332	1 039 365	1 039 257	1 033 193	975 917	1 029 104	
Solid fossil fuels	27 770	23 926	24 612	26 416	25 157	26 758	23 132	20 145	21 165	
Manufactured gases	5 080	5 297	5 151	5 016	4 689	4 904	4 532	4 148	4 352	
Peat & peat products	93	342	447	470	401	391	563	546	428	
Oil shale & oil sands	56	-19	-344	506	165	88	82	70	64	
Gas/Diesel Oil (w/o bio)	233 538	232 633	236 688	238 318	242 589	242 052	242 608	219 803	225 659	
Motor Gasoline (w/o bio)	68 300	68 626	67 108	67 082	67 739	71 229	71 893	61 433	66 229	
Naphtha	33 694	35 069	33 777	33 096	38 035	32 573	30 602	33 537	37 738	
LPG	24 668	26 062	26 291	26 317	26 777	27 751	27 751	25 253	25 687	
All other oil & petroleum products	411 099	408 825	411 548	415 623	427 227	422 812	421 495	383 599	400 626	
Natural gas	223 427	197 026	202 762	209 550	216 904	215 952	214 941	209 717	225 284	
Primary solid biofuels & charcoal	67 711	62 164	64 673	64 915	65 526	67 817	68 286	66 714	71 080	
Liquid biofuels	0	0	0	0	0	0	0	0	0	
All other renewable energies	89 695	86 219	89 584	90 751	97 396	101 720	104 074	103 273	110 590	
Non-renewable wastes	3 463	3 655	3 678	4 146	4 184	4 606	4 741	4 966	4 974	
Electricity	212 260	207 997	211 311	213 858	216 061	215 883	213 646	205 590	214 312	
Heat	48 385	44 528	45 132	46 995	47 179	46 143	45 986	43 864	47 310	
<b>Statistical difference</b>	626	-3 549	-3 418	-2 000	4 213	5 779	4 990	836	-5 162	
<b>Final non-energy consumption</b>	89 309	91 320	88 317	88 066	94 984	91 299	90 696	89 995	94 378	
<b>Final energy consumption</b>	931 392	890 024	908 984	927 266	940 168	942 179	937 506	885 086	939 887	
Industry	236 749	233 298	233 508	237 799	240 064	242 466	239 240	230 923	240 344	
Transport	265 450	268 809	272 463	278 736	284 509	285 945	288 723	251 440	274 835	
Other sectors	429 194	387 917	403 013	410 730	415 595	413 768	409 544	402 723	424 708	
Services	132 725	123 435	128 519	130 171	133 882	131 662	128 567	121 210	129 377	
Households	266 099	234 643	245 035	250 873	251 709	249 744	248 182	248 122	261 771	
<b>Europe 2020-2030 indicators</b>	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Gross inland consumption	1 473 459	1 421 777	1 441 022	1 452 135	1 478 782	1 468 638	1 444 772	1 325 776	1 405 492	
Primary energy consumption	1 384 150	1 330 456	1 352 705	1 364 069	1 383 798	1 377 339	1 354 076	1 235 781	1 311 113	
Final energy consumption	980 349	938 786	957 870	976 884	989 000	991 563	985 968	906 253	968 426	

European Union (27 countries)	Total	Solid fossil fuels	Manufactured gases	Peat and peat products	Oil shale and oil sands	Oil and petroleum products	Natural gas	Renewables and biofuels	Non-renewable waste	Nuclear heat	Heat	Electricity
ktoe	2020											
+ Primary production	572 951.7	83 590.1	Z	779.6	2 516.6	21 324.0	41 206.9	233 330.4	13 921.1	175 176.1	1 106.9	Z
+ Recovered & recycled products	1 595.8	433.4	Z	0.0	0.0	1 162.4	Z	0.0	Z	Z	Z	Z
+ Imports	1 171 889.5	62 887.8	0.0	40.4	0.0	755 025.2	299 807.3	20 881.1	481.5	Z	5.3	32 760.9
- Exports	379 532.5	12 587.8	0.0	6.5	0.0	294 594.5	26 295.6	14 449.4	36.7	Z	1.6	31 560.3
+ Change in stock	12 191.4	6 305.9	0.0	928.7	-23.9	-7 151.4	12 456.1	-321.3	-2.6	Z	Z	Z
<b>= Gross available energy</b>	<b>1 379 095.9</b>	<b>140 629.4</b>	<b>0.0</b>	<b>1 742.1</b>	<b>2 492.7</b>	<b>475 765.7</b>	<b>327 174.7</b>	<b>239 440.8</b>	<b>14 363.3</b>	<b>175 176.1</b>	<b>1 110.6</b>	<b>1 200.5</b>
- International maritime bunkers	39 000.3	0.0	0.0	0.0	0.0	38 583.2	180.8	236.4	Z	Z	Z	Z
<b>= Gross inland consumption</b>	<b>1 340 095.6</b>	<b>140 629.4</b>	<b>0.0</b>	<b>1 742.1</b>	<b>2 492.7</b>	<b>437 182.5</b>	<b>326 993.9</b>	<b>239 204.4</b>	<b>14 363.3</b>	<b>175 176.1</b>	<b>1 110.6</b>	<b>1 200.5</b>
- International aviation	18 041.5	Z	Z	Z	Z	18 041.5	Z	0.0	Z	Z	Z	Z
<b>= Total energy supply</b>	<b>1 322 054.1</b>	<b>140 629.4</b>	<b>0.0</b>	<b>1 742.1</b>	<b>2 492.7</b>	<b>419 141.0</b>	<b>326 993.9</b>	<b>239 204.4</b>	<b>14 363.3</b>	<b>175 176.1</b>	<b>1 110.6</b>	<b>1 200.5</b>
<b>Transformation input</b>	<b>1 224 687.3</b>	<b>144 101.6</b>	<b>6 524.3</b>	<b>1 246.0</b>	<b>2 422.3</b>	<b>624 686.5</b>	<b>104 555.5</b>	<b>151 417.9</b>	<b>9 338.4</b>	<b>175 176.1</b>	<b>1 620.8</b>	<b>3 597.8</b>
+ Electricity & heat generation	535 150.1	87 592.1	6 524.3	1 156.5	569.6	12 564.1	102 829.3	134 181.1	9 338.4	175 176.1	1 620.8	3 597.8
+ Coke ovens	28 540.3	28 274.1	0.0	0.0	12.4	253.8	0.0	0.0	Z	Z	Z	Z
+ Blast furnaces	24 343.1	24 263.1	0.0	0.0	0.0	28.0	52.0	0.0	Z	Z	Z	Z
+ Gas works	717.9	355.1	0.0	0.0	362.5	0.4	0.0	0.0	Z	Z	Z	Z
+ Refineries & petrochemical industry	611 804.6	Z	Z	Z	Z	611 804.6	Z	Z	Z	Z	Z	Z
+ Patent fuel plants	7.7	7.7	0.0	0.0	0.0	0.0	Z	0.0	0.0	Z	Z	Z
+ BKB & PB plants	3 445.6	3 356.1	0.0	89.5	0.0	Z	Z	0.0	0.0	Z	Z	Z
+ Coal liquefaction plants	1 477.9	0.0	0.0	0.0	1 477.9	Z	Z	Z	Z	Z	Z	Z
+ For blended natural gas	854.5	Z	0.0	Z	Z	35.4	Z	819.2	Z	Z	Z	Z
+ Liquid biofuels blended	16 159.3	Z	Z	Z	Z	Z	Z	16 159.3	Z	Z	Z	Z
+ Charcoal production plants	160.4	Z	Z	Z	Z	Z	Z	160.4	Z	Z	Z	Z
+ Gas-to-liquids plants	0.0	Z	Z	Z	Z	Z	0.0	Z	Z	Z	Z	Z
+ Not elsewhere specified	2 025.9	253.3	0.0	0.0	0.0	0.4	1 674.2	97.9	0.0	Z	Z	Z
<b>Transformation output</b>	<b>962 122.6</b>	<b>24 181.0</b>	<b>15 573.9</b>	<b>63.9</b>	<b>Z</b>	<b>611 570.7</b>	<b>824.3</b>	<b>16 163.4</b>	<b>Z</b>	<b>Z</b>	<b>53 876.5</b>	<b>239 869.1</b>
+ Electricity & heat generation	293 745.5	Z	Z	Z	Z	Z	Z	Z	Z	Z	53 876.5	239 869.1
+ Coke ovens	26 463.9	21 251.7	5 212.2	Z	Z	Z	Z	Z	Z	Z	Z	Z
+ Blast furnaces	10 095.2	0.0	10 095.2	Z	Z	Z	Z	Z	Z	Z	Z	Z
+ Gas works	257.3	0.0	257.3	Z	Z	Z	Z	Z	Z	Z	Z	Z
+ Refineries & petrochemical industry	608 338.7	Z	Z	Z	Z	608 338.7	Z	0.0	Z	Z	Z	Z
+ Patent fuel plants	6.9	6.9	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z
+ BKB & PB plants	2 986.4	2 922.5	Z	63.9	Z	Z	Z	Z	Z	Z	Z	Z
+ Coal liquefaction plants	1 092.5	Z	Z	Z	Z	1 092.5	Z	Z	Z	Z	Z	Z
+ Blended in natural gas	824.3	Z	Z	Z	Z	Z	824.3	Z	Z	Z	Z	Z
+ Liquid biofuels blended	16 094.9	Z	Z	Z	Z	Z	Z	16 094.9	Z	Z	Z	Z
+ Charcoal production plants	68.5	Z	Z	Z	Z	Z	Z	68.5	Z	Z	Z	Z
+ Gas-to-liquids plants	1 827.7	Z	Z	Z	Z	1 827.7	Z	Z	Z	Z	Z	Z
+ Not elsewhere specified	320.9	0.0	9.1	0.0	Z	311.7	Z	Z	Z	Z	Z	Z
<b>Energy sector</b>	<b>61 609.5</b>	<b>555.4</b>	<b>4 522.5</b>	<b>13.5</b>	<b>0.0</b>	<b>22 413.6</b>	<b>12 367.5</b>	<b>597.2</b>	<b>59.2</b>	<b>Z</b>	<b>4 284.6</b>	<b>16 795.8</b>
+ Own use in electricity & heat genera	11 696.4	1.4	21.4	0.0	0.0	64.9	103.7	22.0	13.9	Z	981.7	10 487.3
+ Coal mines	1 137.7	252.7	26.5	0.0	0.0	73.9	5.5	0.6	0.0	Z	101.0	677.6
+ Oil & natural gas extraction plants	2 496.4	Z	Z	Z	Z	17.3	2 030.7	0.0	Z	Z	1.1	447.3
+ Patent fuel plants	0.1	0.0	0.0	0.0	0.0	Z	Z	0.0	0.0	Z	0.0	0.1
+ Coke ovens	3 000.2	126.9	2 565.6	0.0	0.0	0.2	19.9	16.1	3.0	Z	148.1	120.3
+ BKB & PB plants	817.6	148.1	0.0	13.5	0.0	Z	Z	8.4	0.0	Z	310.9	336.8
+ Gas works	17.5	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	Z	0.3	14.3
+ Blast furnaces	1 909.6	13.5	1 665.5	0.0	0.0	0.2	49.0	0.0	42.3	Z	15.6	123.6
+ Petroleum refineries (oil refineries)	36 332.5	12.9	19.6	0.0	0.0	21 936.8	9 839.8	49.4	0.0	Z	1 724.9	2 749.1
+ Nuclear industry	108.8	Z	Z	Z	Z	Z	Z	Z	Z	Z	0.0	108.8
+ Coal liquefaction plants	36.1	0.0	13.8	0.0	0.0	Z	Z	Z	Z	Z	6.0	16.3
+ Liquefaction & regasification plants (	199.1	Z	Z	Z	Z	Z	189.7	Z	Z	Z	0.0	9.4
+ Gasification plants for biogas	483.8	Z	Z	Z	Z	Z	Z	476.6	0.0	Z	7.2	0.0
+ Gas-to-liquids (GTL) plants	0.0	Z	Z	Z	Z	Z	0.0	Z	Z	Z	0.0	0.0
+ Charcoal production plants	0.0	Z	Z	Z	Z	Z	Z	0.0	0.0	Z	0.0	0.0
+ Not elsewhere specified (energy)	3 373.7	0.0	210.1	0.0	0.0	320.3	129.2	21.2	0.0	Z	987.9	1 705.0
<b>Distribution losses</b>	<b>21 962.7</b>	<b>8.0</b>	<b>379.3</b>	<b>0.1</b>	<b>0.0</b>	<b>12.4</b>	<b>1 178.6</b>	<b>79.9</b>	<b>0.2</b>	<b>Z</b>	<b>5 218.0</b>	<b>15 086.3</b>
<b>Available for final consumption</b>	<b>975 917.2</b>	<b>20 145.5</b>	<b>4 147.7</b>	<b>546.4</b>	<b>70.4</b>	<b>383 599.2</b>	<b>209 716.5</b>	<b>103 272.8</b>	<b>4 965.6</b>	<b>0.0</b>	<b>43 863.6</b>	<b>205 589.6</b>
<b>Final non-energy consumption</b>	<b>89 995.2</b>	<b>1 457.0</b>	<b>14.1</b>	<b>0.0</b>	<b>69.1</b>	<b>73 690.4</b>	<b>14 764.6</b>	<b>0.0</b>	<b>Z</b>	<b>Z</b>	<b>Z</b>	<b>Z</b>
<b>Final energy consumption</b>	<b>885 085.8</b>	<b>19 146.1</b>	<b>4 114.9</b>	<b>379.1</b>	<b>1.4</b>	<b>309 799.8</b>	<b>194 121.1</b>	<b>103 655.5</b>	<b>4 965.5</b>	<b>Z</b>	<b>43 887.2</b>	<b>205 015.1</b>
+ Industry	230 923.3	10 908.2	4 101.0	122.0	1.4	23 041.5	74 152.6	23 181.8	4 726.4	Z	14 650.7	76 037.9
+ Iron & steel	22 401.3	2 344.4	3 897.7	0.0	0.0	381.5	7 103.0	13.7	4.7	Z	465.2	8 191.1
+ Chemical & petrochemical	50 488.6	2 340.1	69.0	2.8	0.0	7 312.6	18 673.2	397.0	406.2	Z	7 247.8	14 040.0
+ Non-ferrous metals	8 804.3	115.0	32.9	0.0	0.0	297.4	3 212.6	15.3	7.6	Z	144.7	4 978.7
+ Non-metallic minerals	32 852.1	3 836.8	66.0	0.3	1.4	5 357.7	12 355.7	1 789.0	3 870.5	Z	276.7	5 298.1
+ Transport equipment	6 778.0	169.5	20.0	0.0	0.0	163.8	2 060.4	35.8	0.2	Z	568.5	3 759.9
+ Machinery	15 842.4	85.8	9.2	0.0	0.0	809.5	5 440.4	131.2	12.2	Z	651.3	8 702.9
+ Mining & quarrying	3 638.2	229.2	5.9	0.0	0.0	779.8	723.0	70.5	1.0	Z	146.7	1 682.1
+ Food, beverages & tobacco	27 421.5	1 078.8	0.0	0.0	0.0	1 402.5	12 605.8	1 438.2	8.5	Z	1 515.6	9 372.0
+ Paper, pulp & printing	31 269.9	582.2	0.0	117.2	0.0	602.9	6 016.4	13 186.8	256.7	Z	2 102.3	8 405.4
+ Wood & wood products	8 606.3	28.7	0.0	1.7	0.0	186.4	482.5	4 948.6	15.7	Z	733.3	2 209.5
+ Construction	9 145.4	35.3	0.0	0.0	0.0	5 135.0	1 831.0	264.2	0.8	Z	37.4	1 841.7
+ Textile & leather	3 251.6	21.1	0.0	0.0	0.0	116.2	1 597.2	28.4	0.4	Z	125.7	1 362.6
+ Not elsewhere specified (industry)	10 076.8	41.3	0.3	0.0	0.0	496.1	2 051.4	516.3	142.0	Z	635.5	6 194.0
+ Transport	251 439.6	0.4	0.0	0.0	0.0	227 702.7	3 066.1	15 997.4	0.0	Z	Z	4 673.0
+ Rail	4 748.3	0.4	0.0	0.0	0.0	1 075.5	Z	37.1	0.0	Z	Z	3 635.3
+ Road	237 787.6	Z	Z	Z	Z	219 838.6	1 680.8	15 938.7	0.0	Z	Z	329.5
+ Domestic aviation	3 026.6	Z	Z	Z	Z	3 026.6	Z	0.0	Z	Z	Z	Z
+ Domestic navigation	3 564.9	0.0	0.0	0.0	0.0	3 547.0	Z	17.9	0.0	Z	Z	Z
+ Pipeline transport	1 506.2	Z	Z	Z	Z	0.0	1 366.5	0.0	Z	Z	Z	139.6
+ Not elsewhere specified (transport)	805.9	0.0	0.0	0.0	0.0	214.9	18.7	3.7	0.0	Z	Z	568.6
+ Other	402 722.9	8 237.6	13.9	257.1	0.0	59 055.6	116 902.5	64 476.4	239.1	Z	29 236.5	124 304.3
+ Commercial & public services	121 209.6	638.2	13.9	6.7	0.0	9 736.4	34 547.3	9 311.7	238.8	Z	8 468.1	58 248.4
+ Households	248 122.4	6 722.4	0.0	203.1	0.0	30 460.0	78 599.9	50 456.3	0.0	Z	20 401.8	61 278.8
+ Agriculture & forestry	28 418.1	791.5	0.0	47.3	0.0	16 077.0	3 582.5	3 142.8	0.0	Z	322.6	4 454.5
+ Fishing	1 354.6	0.0	0.0	0.0	0.0	1 246.2	13.1	41.0	0.0	Z	0.0	54.2
+ Not elsewhere specified (other)	3 618.3	85.4	0.0	0.0	0.0	1 536.0	159.6	1 524.5	0.3	Z	44.0	268.4
<b>Statistical differences</b>	<b>836.2</b>	<b>-457.6</b>	<b>18.7</b>	<b>167.3</b>	<b>-0.1</b>	<b>109.0</b>	<b>830.8</b>	<b>-382.8</b>	<b>0.0</b>	<b>0.0</b>	<b>-23.7</b>	<b>574.5</b>
Gross electricity production	239 455.8	30 301.4	2 191.8	269.7	193.2							

European Union (27 countries)	Total	Solid fossil fuels	Manufactured gases	Peat and peat products	Oil shale and oil sands	Oil and petroleum products	Natural gas	Renewables and biofuels	Non-renewable waste	Nuclear heat	Heat	Electricity
ktoe	2021											
+ Primary production	597 595.7	90 966.5	Z	448.0	2 428.3	20 109.6	37 964.3	243 970.6	13 933.1	186 662.5	1 112.8	Z
+ Recovered & recycled products	1 466.9	309.5	Z	0.0	0.0	1 157.1	Z	0.2	Z	Z	Z	Z
+ Imports	1 224 306.8	75 178.0	0.0	43.6	0.0	780 766.1	310 781.4	22 437.4	578.4	Z	5.6	34 516.4
- Exports	412 326.8	14 224.7	0.0	3.6	0.0	321 721.0	26 963.0	15 505.1	20.4	Z	1.8	33 887.2
+ Change in stock	51 384.2	10 527.0	0.0	881.9	297.6	20 434.6	18 509.4	729.7	4.0	Z	Z	Z
<b>= Gross available energy</b>	<b>1 462 426.8</b>	<b>162 756.3</b>	<b>0.0</b>	<b>1 369.9</b>	<b>2 725.9</b>	<b>500 746.5</b>	<b>340 292.1</b>	<b>251 632.8</b>	<b>14 495.0</b>	<b>186 662.5</b>	<b>1 116.6</b>	<b>629.2</b>
- International maritime bunkers	40 760.8	0.0	0.0	0.0	0.0	40 330.6	264.0	166.1	Z	Z	Z	Z
<b>= Gross inland consumption</b>	<b>1 421 666.1</b>	<b>162 756.3</b>	<b>0.0</b>	<b>1 369.9</b>	<b>2 725.9</b>	<b>460 415.9</b>	<b>340 028.0</b>	<b>251 466.7</b>	<b>14 495.0</b>	<b>186 662.5</b>	<b>1 116.6</b>	<b>629.2</b>
- International aviation	21 496.1	Z	Z	Z	Z	21 496.1	Z	0.0	Z	Z	Z	Z
<b>= Total energy supply</b>	<b>1 400 170.0</b>	<b>162 756.3</b>	<b>0.0</b>	<b>1 369.9</b>	<b>2 725.9</b>	<b>438 919.8</b>	<b>340 028.0</b>	<b>251 466.7</b>	<b>14 495.0</b>	<b>186 662.5</b>	<b>1 116.6</b>	<b>629.2</b>
<b>Transformation input</b>	<b>1 290 753.0</b>	<b>166 308.3</b>	<b>7 109.5</b>	<b>981.8</b>	<b>2 662.4</b>	<b>651 286.9</b>	<b>104 120.8</b>	<b>157 018.5</b>	<b>9 462.0</b>	<b>186 662.5</b>	<b>1 619.7</b>	<b>3 517.9</b>
+ Electricity & heat generation	566 253.2	102 172.3	7 109.5	906.6	873.5	13 335.7	102 564.4	138 029.1	9 462.0	186 662.5	1 619.7	3 517.9
+ Coke ovens	29 337.3	29 129.1	0.0	0.0	11.1	197.2	0.0	0.0	Z	Z	Z	Z
+ Blast furnaces	31 164.6	31 093.0	0.0	0.0	0.0	26.1	45.5	0.0	Z	Z	Z	Z
+ Gas works	303.1	0.7	0.0	0.0	302.0	0.4	0.0	0.0	Z	Z	Z	Z
+ Refineries & petrochemical industry	637 699.3	Z	Z	Z	Z	637 696.5	Z	Z	Z	Z	Z	Z
+ Patent fuel plants	7.0	7.0	0.0	0.0	0.0	0.0	Z	0.0	Z	Z	Z	Z
+ BKB & PB plants	3 712.1	3 636.9	0.0	75.2	0.0	Z	Z	0.0	Z	Z	Z	Z
+ Coal liquefaction plants	1 475.8	0.0	0.0	0.0	1 475.8	Z	Z	Z	Z	Z	Z	Z
+ For blended natural gas	2 019.8	Z	0.0	Z	Z	30.6	Z	1 989.2	Z	Z	Z	Z
+ Liquid biofuels blended	16 731.9	Z	Z	Z	Z	Z	Z	16 731.9	Z	Z	Z	Z
+ Charcoal production plants	167.0	Z	Z	Z	Z	Z	Z	167.0	Z	Z	Z	Z
+ Gas-to-liquids plants	0.0	Z	Z	Z	Z	Z	0.0	Z	Z	Z	Z	Z
+ Not elsewhere specified	1 881.8	269.3	0.0	0.0	0.0	0.3	1 510.9	101.3	0.0	Z	Z	Z
<b>Transformation output</b>	<b>1 006 890.5</b>	<b>25 159.0</b>	<b>17 260.3</b>	<b>56.7</b>	<b>Z</b>	<b>636 923.8</b>	<b>2 017.3</b>	<b>16 786.7</b>	<b>Z</b>	<b>Z</b>	<b>58 339.2</b>	<b>250 347.5</b>
+ Electricity & heat generation	308 686.7	Z	Z	Z	Z	Z	Z	Z	Z	Z	58 339.2	250 347.5
+ Coke ovens	27 787.8	22 045.1	5 742.7	Z	Z	Z	Z	Z	Z	Z	Z	Z
+ Blast furnaces	11 459.9	0.0	11 459.9	Z	Z	Z	Z	Z	Z	Z	Z	Z
+ Gas works	56.9	0.0	56.9	Z	Z	Z	Z	Z	Z	Z	Z	Z
+ Refineries & petrochemical industry	633 913.0	Z	Z	Z	Z	633 913.0	Z	0.0	Z	Z	Z	Z
+ Patent fuel plants	6.1	6.1	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z
+ BKB & PB plants	3 164.5	3 107.8	Z	56.7	Z	Z	Z	Z	Z	Z	Z	Z
+ Coal liquefaction plants	1 135.7	Z	Z	Z	Z	1 135.7	Z	Z	Z	Z	Z	Z
+ Blended in natural gas	2 017.3	Z	Z	Z	Z	Z	2 017.3	Z	Z	Z	Z	Z
+ Liquid biofuels blended	16 716.6	Z	Z	Z	Z	Z	Z	16 716.6	Z	Z	Z	Z
+ Charcoal production plants	70.1	Z	Z	Z	Z	Z	Z	70.1	Z	Z	Z	Z
+ Gas-to-liquids plants	1 566.9	Z	Z	Z	Z	1 566.9	Z	Z	Z	Z	Z	Z
+ Not elsewhere specified	308.9	0.0	0.8	0.0	Z	308.1	Z	Z	Z	Z	Z	Z
<b>Energy sector</b>	<b>63 145.0</b>	<b>435.5</b>	<b>5 185.7</b>	<b>16.7</b>	<b>0.0</b>	<b>23 918.4</b>	<b>11 468.7</b>	<b>562.8</b>	<b>58.6</b>	<b>Z</b>	<b>4 051.9</b>	<b>17 446.6</b>
+ Own use in electricity & heat genera	12 258.7	0.0	33.0	0.0	0.0	58.5	75.4	26.6	12.2	Z	1 139.0	10 914.0
+ Coal mines	960.8	130.5	0.0	0.0	0.0	56.8	4.3	0.4	0.0	Z	108.1	660.7
+ Oil & natural gas extraction plants	2 487.0	Z	Z	Z	Z	10.2	2 074.7	0.0	Z	Z	1.6	400.4
+ Patent fuel plants	0.1	0.0	0.0	0.0	0.0	Z	Z	0.0	0.0	Z	0.0	0.1
+ Coke ovens	3 328.1	154.8	2 877.2	0.0	0.0	0.2	6.2	10.6	3.8	Z	147.1	128.2
+ BKB & PB plants	782.1	134.1	0.0	16.7	0.0	Z	Z	0.8	0.0	Z	292.0	338.5
+ Gas works	4.9	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	Z	0.3	1.6
+ Blast furnaces	2 207.7	1.7	1 951.5	0.0	0.0	0.2	53.3	0.0	42.7	Z	15.4	143.0
+ Petroleum refineries (oil refineries)	36 620.3	14.4	12.8	0.0	0.0	23 432.7	8 876.0	45.6	0.0	Z	1 373.2	2 865.5
+ Nuclear industry	103.3	Z	Z	Z	Z	Z	Z	Z	Z	Z	0.0	103.3
+ Coal liquefaction plants	32.0	0.0	13.9	0.0	0.0	Z	Z	Z	Z	Z	2.4	15.6
+ Liquefaction & regasification plants (	210.4	Z	Z	Z	Z	Z	201.6	Z	Z	Z	0.0	8.8
+ Gasification plants for biogas	466.9	Z	Z	Z	Z	Z	Z	457.6	0.0	Z	9.3	0.0
+ Gas-to-liquids (GTL) plants	0.0	Z	Z	Z	Z	Z	0.0	Z	Z	Z	0.0	0.0
+ Charcoal production plants	0.0	Z	Z	Z	Z	Z	Z	0.0	0.0	Z	0.0	0.0
+ Not elsewhere specified (energy)	3 682.7	0.0	297.2	0.0	0.0	359.8	177.2	18.1	0.0	Z	963.6	1 866.9
<b>Distribution losses</b>	<b>24 058.7</b>	<b>6.1</b>	<b>612.9</b>	<b>0.0</b>	<b>0.0</b>	<b>11.9</b>	<b>1 171.5</b>	<b>82.0</b>	<b>0.2</b>	<b>Z</b>	<b>6 473.8</b>	<b>15 700.3</b>
<b>Available for final consumption</b>	<b>1 029 103.7</b>	<b>21 165.4</b>	<b>4 352.2</b>	<b>428.1</b>	<b>63.6</b>	<b>400 626.4</b>	<b>225 284.3</b>	<b>110 590.0</b>	<b>4 974.2</b>	<b>0.0</b>	<b>47 310.5</b>	<b>214 311.9</b>
<b>Final non-energy consumption</b>	<b>94 378.4</b>	<b>1 547.1</b>	<b>17.3</b>	<b>0.0</b>	<b>63.6</b>	<b>78 327.2</b>	<b>14 423.3</b>	<b>0.0</b>	<b>Z</b>	<b>Z</b>	<b>Z</b>	<b>Z</b>
<b>Final energy consumption</b>	<b>939 886.9</b>	<b>19 036.6</b>	<b>4 289.7</b>	<b>355.4</b>	<b>0.0</b>	<b>327 457.5</b>	<b>212 178.4</b>	<b>110 442.3</b>	<b>4 973.7</b>	<b>Z</b>	<b>47 292.2</b>	<b>213 861.0</b>
+ Industry	240 343.8	11 069.7	4 280.5	107.2	0.0	23 664.9	78 547.8	23 310.9	4 718.7	Z	14 812.6	79 831.4
+ Iron & steel	24 494.1	2 699.1	4 064.6	0.0	0.0	498.2	7 645.4	13.3	2.0	Z	413.9	9 157.6
+ Chemical & petrochemical	51 564.5	2 119.2	84.8	1.0	0.0	7 335.2	19 700.2	393.8	375.3	Z	7 309.2	14 245.8
+ Non-ferrous metals	9 268.2	118.7	29.7	0.0	0.0	291.6	3 630.5	4.1	5.9	Z	137.7	5 050.0
+ Non-metallic minerals	33 904.9	3 801.0	76.0	0.2	0.0	5 259.9	12 962.4	1 904.7	3 949.3	Z	245.6	5 705.7
+ Transport equipment	7 204.2	175.0	14.3	0.0	0.0	154.3	2 451.8	48.9	0.5	Z	504.7	3 854.6
+ Machinery	16 004.7	70.1	7.4	0.0	0.0	838.5	4 899.5	130.8	11.1	Z	666.3	9 380.9
+ Mining & quarrying	3 705.5	228.3	3.3	0.0	0.0	853.3	704.6	81.1	1.1	Z	160.2	1 673.6
+ Food, beverages & tobacco	27 898.9	1 110.6	0.0	0.0	0.0	1 408.0	12 775.7	1 327.0	8.0	Z	1 568.3	9 701.3
+ Paper, pulp & printing	32 507.9	610.5	0.0	103.1	0.0	710.6	7 131.4	12 789.8	242.2	Z	2 289.7	8 630.7
+ Wood & wood products	9 257.9	32.4	0.0	2.9	0.0	194.8	562.3	5 251.6	27.8	Z	768.7	2 417.4
+ Construction	10 206.9	45.3	0.0	0.0	0.0	5 188.0	2 500.0	289.6	0.9	Z	31.5	2 151.7
+ Textile & leather	3 083.6	14.5	0.0	0.0	0.0	141.9	1 393.9	26.6	0.4	Z	128.1	1 378.2
+ Not elsewhere specified (industry)	10 865.1	45.1	0.5	0.0	0.0	790.6	2 190.2	672.0	94.2	Z	588.7	6 483.8
+ Transport	274 834.9	0.4	0.0	0.0	0.0	249 154.4	3 718.1	16 746.3	0.0	Z	Z	5 215.7
+ Rail	5 219.7	0.4	0.0	0.0	0.0	1 252.0	Z	47.8	0.0	Z	Z	3 919.4
+ Road	258 975.1	Z	Z	Z	Z	239 403.3	2 305.1	16 672.6	0.0	Z	Z	594.1
+ Domestic aviation	4 322.4	Z	Z	Z	Z	4 322.4	Z	0.0	Z	Z	Z	Z
+ Domestic navigation	3 972.4	0.0	0.0	0.0	0.0	3 950.8	Z	21.7	0.0	Z	Z	Z
+ Pipeline transport	1 527.3	Z	Z	Z	Z	0.0	1 389.7	0.0	Z	Z	Z	137.6
+ Not elsewhere specified (transport)	818.0	0.0	0.0	0.0	0.0	225.9	23.3	4.2	0.0	Z	Z	564.6
+ Other	424 708.1	7 966.5	9.2	248.2	0.0	54 638.2	129 912.5	70 385.1	254.9	Z	32 479.6	128 814.0
+ Commercial & public services	129 376.8	797.2	9.2	7.4	0.0	10 844.5	38 179.2	9 945.2	254.4	Z	9 464.1	59 875.5
+ Households	261 771.0	6 435.4	0.0	195.4	0.0	24 952.4	87 708.4	55 606.7	0.0	Z	22 599.5	64 273.2
+ Agriculture & forestry	28 343.6	656.0	0.0	45.4	0.0	15 836.1	3 784.7	3 243.5	0.2	Z	338.2	4 439.5
+ Fishing	1 432.1	0.1	0.0	0.0	0.0	1 288.5	44.6	38.8	0.0	Z	0.1	60.1
+ Not elsewhere specified (other)	3 784.6	77.8	0.0	0.0	0.0	1 716.8	195.6	1 550.9	0.3	Z	77.7	165.7
<b>Statistical differences</b>	<b>-5 161.6</b>	<b>581.7</b>	<b>45.2</b>	<b>72.6</b>	<b>-0.0</b>	<b>-5 158.3</b>	<b>-1 317.3</b>	<b>147.7</b>	<b>0.5</b>	<b>0.0</b>	<b>18.3</b>	<b>450.8</b>
Gross electricity production	249 915.2	36 030.3	2 411.5	215.2	296.2							



## Gross electricity production

European Union (27 countries)

GWh	2015	2016	2017	2018	2019	2020	2021
Total	2 906 580	2 928 147	2 960 924	2 943 051	2 907 224	2 789 678	2 911 543

## Solid fossil fuels (coal), Peat, Oil shale and oil sands

GWh	2015	2016	2017	2018	2019	2020	2021
Anthracite	12 238	4 878	4 103	4 013	680	715	636
Coking coal	1 073	8 638	11 164	8 805	13	81	64
Other bituminous coal	370 703	340 839	316 143	286 535	205 613	154 218	190 144
Sub-bituminous coal	4 722	2 634	3 170	2 394	1 554	572	389
Lignite	313 662	299 424	301 921	291 618	241 259	195 292	226 128
Coke oven coke	1	0	0	0	0	0	0
Patent fuel	0	0	0	0	0	0	0
Brown coal briquettes	2 616	2 631	2 329	2 132	1 799	1 510	1 663
Coal tar	14	17	8	11	15	18	8
Peat	5 834	5 487	5 243	5 922	5 161	3 137	2 502
Peat products	6	1	0	0	1	0	0
Oil shale and oil sands	7 887	9 623	9 912	9 380	4 318	2 247	3 444
Sub-total	718 756	674 172	653 994	610 809	460 413	357 789	424 979

## Natural gas and manufactured gases

GWh	2015	2016	2017	2018	2019	2020	2021
Natural gas	396 277	466 223	525 178	490 689	569 312	560 997	551 784
Coke oven gas	7 155	7 311	7 770	7 204	7 166	6 237	6 117
Gas works gas	2 124	2 063	1 939	1 803	1 734	1 250	142
Blast furnace gas	20 730	20 566	20 844	20 866	19 455	16 343	20 053
Other recovered gases	2 243	1 950	2 183	1 867	1 910	1 660	1 734
Sub-total	428 530	498 114	557 914	522 430	599 578	586 487	579 830

## Oil and petroleum products

GWh	2015	2016	2017	2018	2019	2020	2021
Crude oil	0	0	0	0	0	0	0
Refinery gas	6 431	7 111	6 550	7 158	6 955	6 622	6 310
Liquefied petroleum gases	415	543	452	237	232	147	145
Naphtha	0	0	0	0	0	0	0
Kerosene-type jet fuel	0	0	0	1	0	0	1
Other kerosene	10	7	13	13	4	2	19
Gas oil and diesel oil	9 987	9 834	10 518	9 704	10 274	10 087	10 461
Fuel oil	31 155	30 208	28 737	25 614	24 894	21 345	23 388
Petroleum coke	4 158	3 598	2 280	1 577	621	517	465
Bitumen	0	0	0	0	0	0	0
Other oil products	11 140	10 677	10 127	10 219	8 970	9 118	5 955
Sub-total	63 296	61 979	58 676	54 523	51 951	47 839	46 744

## Renewables and biofuels

GWh	2015	2016	2017	2018	2019	2020	2021
Hydro	363 241	372 711	322 464	370 234	345 643	375 486	374 850
<i>of which pumped hydro</i>	27 248	27 118	28 117	26 352	25 383	28 306	26 531
Geothermal	6 614	6 734	6 715	6 655	6 726	6 717	6 538
Wind	263 204	266 816	312 313	320 616	367 118	397 799	386 867
Solar (photovoltaic + thermal)	100 857	101 036	107 934	113 066	123 884	145 117	163 765
Tide, wave, ocean	487	501	522	480	499	509	503
Solid biofuels	72 077	72 377	74 261	76 252	80 560	82 959	92 752
Liquid biofuels	5 495	5 292	4 990	4 827	5 133	5 045	4 440
Biogases	53 803	55 047	55 648	55 096	54 991	55 766	52 603
Renewable municipal waste	18 011	18 394	18 739	19 335	19 011	18 873	19 573
Sub-total	883 789	898 908	903 587	966 562	1 003 565	1 088 272	1 101 890

## Non-renewable wastes

GWh	2015	2016	2017	2018	2019	2020	2021
Industrial waste (non-renewable)	2 706	3 026	2 750	2 925	2 942	2 639	2 573
Non-renewable municipal waste	16 808	17 853	18 218	18 838	18 584	18 334	18 797
Sub-total	19 514	20 880	20 968	21 764	21 526	20 973	21 370

## Other sources

GWh	2015	2016	2017	2018	2019	2020	2021
Nuclear	786 676	767 959	759 383	761 943	765 338	683 512	731 701
Heat from chemical sources	1 111	1 160	1 172	1 099	1 038	1 089	1 105
Other fuels not elsewhere specified	4 909	4 974	5 230	3 922	3 815	3 717	3 924
Sub-total	792 695	774 093	765 785	766 965	770 192	688 318	736 729

## Solid fossil fuels (coal), Peat, Oil shale and oil sands - Inland consumption

kt	2015	2016	2017	2018	2019	2020	2021
Anthracite	7 504	5 174	4 900	4 920	3 236	2 465	2 797
Coking coal	52 226	54 588	55 495	54 149	48 335	42 830	44 021
Other bituminous coal	188 310	180 999	171 750	162 529	127 619	99 821	118 364
Sub-bituminous coal	4 100	2 858	3 159	2 617	2 039	1 224	1 156
Lignite	399 269	373 150	382 332	369 385	306 097	246 334	277 659
Coke oven coke	35 730	34 735	35 004	34 745	32 868	28 101	32 941
Patent fuel	199	194	167	173	102	81	87
Brown coal briquettes	7 052	7 222	7 186	6 759	6 048	5 504	6 062
Coal tar	1 070	1 123	1 045	1 098	1 067	899	823
Peat	9 901	9 885	9 553	10 175	8 926	6 425	5 126
Peat products	231	223	205	237	189	188	171
Oil shale and oil sands	18 051	19 566	21 891	21 374	15 285	12 072	13 186

## Natural gas and manufactured gases - Inland consumption

TJ (GCV)	2015	2016	2017	2018	2019	2020	2021
Natural gas	13 777 461	14 584 310	15 404 702	15 120 868	15 604 388	15 227 194	15 903 964
Coke oven gas	315 740	312 052	308 086	277 102	266 600	242 473	267 150
Gas works gas	20 405	18 337	17 333	17 159	15 917	11 969	2 646
Blast furnace gas	444 399	435 493	450 220	481 267	451 736	377 982	432 962
Other recovered gases	64 226	63 369	63 351	53 100	52 317	45 067	46 875

## Crude oil, NGL, refinery feedstocks, additives and oxygenates and other hydrocarbons

kt	2015	2016	2017	2018	2019	2020	2021
Imports	542 504	536 228	549 808	539 195	530 347	464 371	473 692
Refinery intake	575 738	575 568	588 037	579 678	570 156	502 106	519 822

## Total oil products (questionnaire definition)

kt	2015	2016	2017	2018	2019	2020	2021
Imports	848 598	853 573	868 392	856 743	846 971	745 199	770 791
Export	340 553	350 876	357 771	346 270	326 067	291 639	318 390
Total refinery output	570 539	569 935	581 636	573 790	563 116	496 261	512 017
Gas oil and diesel oil	235 414	229 757	232 074	227 281	228 038	210 768	214 172
Motor gasoline	102 047	101 740	101 782	102 321	99 956	87 263	93 098
Fuel oil	66 954	71 853	73 264	71 803	61 150	48 812	51 949
Naphtha	36 297	37 336	42 867	41 907	40 651	38 266	38 043
Kerosene-type jet fuel	28 421	28 809	30 262	33 306	33 062	15 883	16 384
All other oil products	101 406	100 440	101 387	97 172	100 258	95 269	98 371

## Biofuels - Inland consumption

	2015	2016	2017	2018	2019	2020	2021
Primary solid biofuels [TJ]	3 783 080	3 814 193	3 869 241	3 984 029	4 057 549	4 025 668	4 359 881
Charcoal [kt]	532	492	517	528	500	444	437
Biogases [TJ]	551 326	568 982	581 985	580 268	592 251	614 908	625 835
Pure biogasoline [kt]	3 714	3 640	3 839	4 118	4 356	4 339	4 811
Pure biodiesels [kt]	11 900	11 606	12 951	14 532	14 731	15 072	15 718
Other liquid biofuels [kt]	1 418	1 439	1 350	1 382	1 499	1 484	1 362

## Wastes - Inland consumption

TJ	2015	2016	2017	2018	2019	2020	2021
Renewable municipal waste	377 126	385 470	397 656	390 913	395 136	399 661	409 465
Non-renewable municipal waste	357 508	382 208	393 219	386 537	390 248	395 068	399 305
Industrial waste (non-renewable)	176 652	193 718	185 722	195 742	202 075	206 295	207 573

## Non-combustible renewables - Inland consumption

TJ	2015	2016	2017	2018	2019	2020	2021
Geothermal	272 239	280 383	283 521	284 082	288 813	288 822	284 292
Solar thermal	179 765	182 132	190 137	179 916	194 623	187 583	190 553
Ambient heat (heat pumps)	257 497	290 789	456 113	486 381	520 765	553 193	630 597