



AFREC

African Energy
Commission

Key Africa Energy Statistics 2025



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FOREWORD

We are pleased to present the 2025 edition of AFREC's 'Key Africa Energy Statistics' (KAES) report, prepared with the active collaboration of African Union Member States. The data included were jointly collected from AU Member States and validated to ensure reliable and credible information for decision makers.

This report highlights key trends from the updated African Energy Information System (AEIS). Reliable, timely, updated and harmonised energy statistics are fundamental to evidence-based policymaking, investment planning, monitoring and evaluation of Africa's progress towards sustainable energy transitions. The African Energy Key Statistics 2025 publication provides a consolidated statistical overview of Africa's 2023 energy system, covering energy supply, transformation and consumption over more than two decades.

This publication supports the implementation of Agenda 2063, the African Continental Power Systems Master Plan, the African Energy Efficiency Strategy, and global commitments under SDG 7 of Agenda 2030 and the Paris Agreement. It is produced using official national data reported to AFREC and processed in line with the International Recommendations for Energy Statistics (IRES).

Between 2010 and 2023, Africa's energy system expanded significantly in response to population growth, economic transformation and rapid urbanization. Total primary energy supply (TPES) increased steadily, driven mainly by fossil fuels and traditional biomass, while electricity generation expanded rapidly.

Key findings include:

- Total primary energy supply grew continuously (38% increase) over the period, with biomass and oil dominating.
- Biomass remains the dominant fuel in Sub-Saharan Africa.
- Electricity generation more than doubled since 2010, led by hydropower, gas fired generation and emerging renewables.
- Total final consumption increased across all sectors, particularly in transport, households and industry.
- Africa remains a net exporter of crude oil and natural gas, while many countries remain net importers of refined petroleum products and electricity.

AFREC remains committed to providing timely and reliable data to inform decisions and guide energy policies. The KAES 2025 report is part of this effort, providing a solid evidence base validated by Member States.

We hope that this report will support your planning and decision-making efforts as we work together towards a sustainable energy future in Africa. United, we can overcome the challenges and build the Africa we want.

RASHID Ali Abdallah (Mr.)
Executive Director, African Energy Commission (AFREC)

ABBREVIATIONS

Mcm	Million cubic meters
Gcal	Giga calorie
GCV	Gross calorific value
GW	Gigawatt
GWh	Gigawatt hour
kcal	Kilocalorie
kg	Kilogram
kJ	Kilojoule
kWh	Kilowatt hour
MBtu	Million British thermal units
Mt	Million tons
Mtoe	Million tons of oil equivalent
t	Metric ton=ton=1000kg
Kt	Kilotons
TJ	Tera joule
toe	Ton of oil equivalent =107 kcal
Kb/cd	Thousand barrels per calendar day
TWh	Terawatt hour
USD	United States Dollar

LIST OF PARTICIPATING AFRICAN UNION MEMBER STATES

Algeria	Libya
Angola	Madagascar
Benin	Malawi
Botswana	Mali
Burkina Faso	Mauritania
Burundi	Mauritius
Cameroon	Morocco
Cabo Verde	Mozambique
Central African Republic	Namibia
Chad	Niger
Comoros	Nigeria
Congo Republic	Rwanda
Cote d'Ivoire	Sahrawi
Djibouti	Somalia
Democratic Republic of the Congo	São Tome & Principe
Egypt	Senegal
Equatorial Guinea	Seychelles
Eritrea	Sierra Leone
Eswatini	South Africa
Ethiopia	South Sudan
Gabon	Sudan
Gambia	Tanzania
Ghana	Togo
Guinea	Tunisia
Guinea Bissau	Uganda
Kenya	Zambia
Lesotho	Zimbabwe
Liberia	

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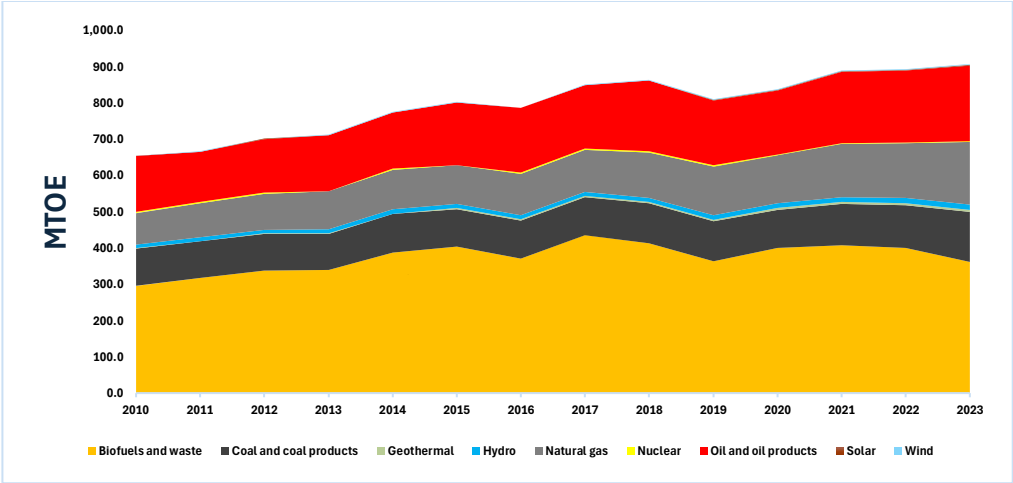
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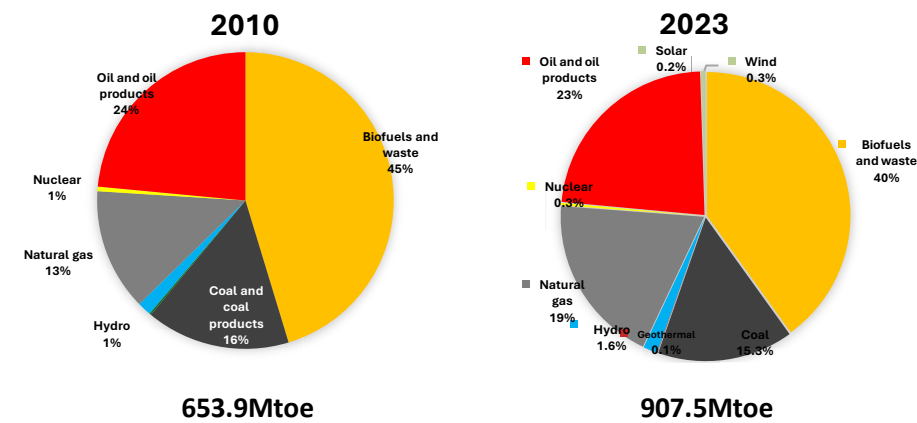
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Total Primary Energy Supply (TPES) from 2000 to 2023 by fuel

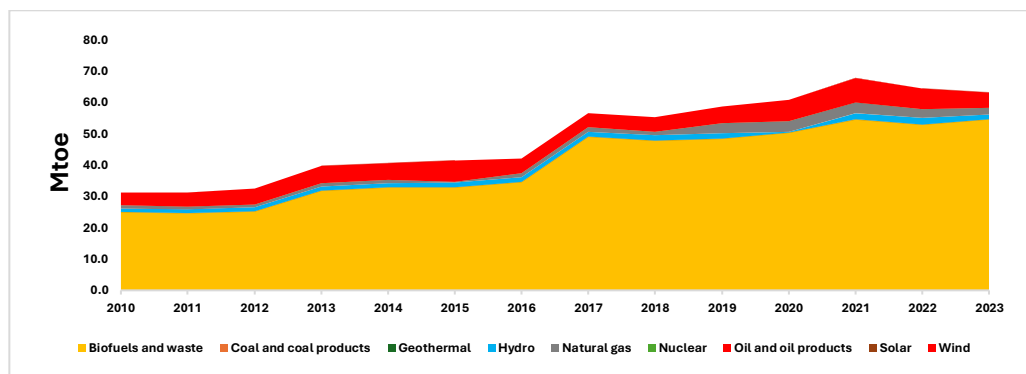


Share of Fuel 2010 vs 2023

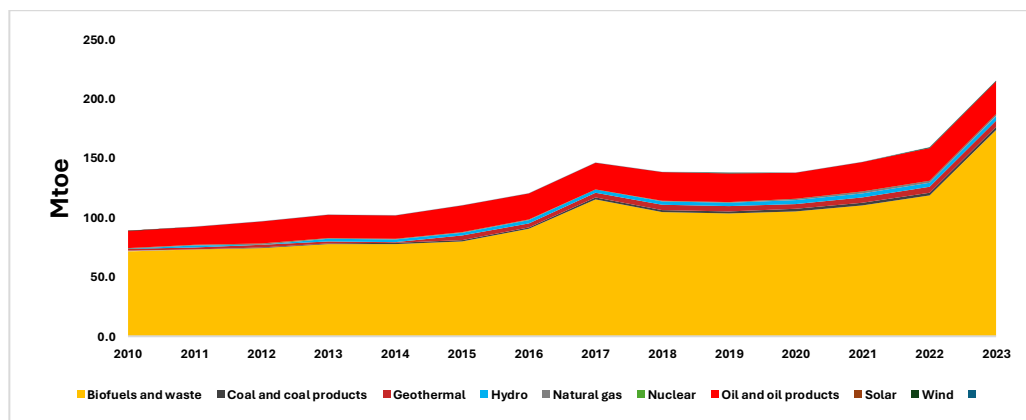


1.2 SUPPLY BY REGION

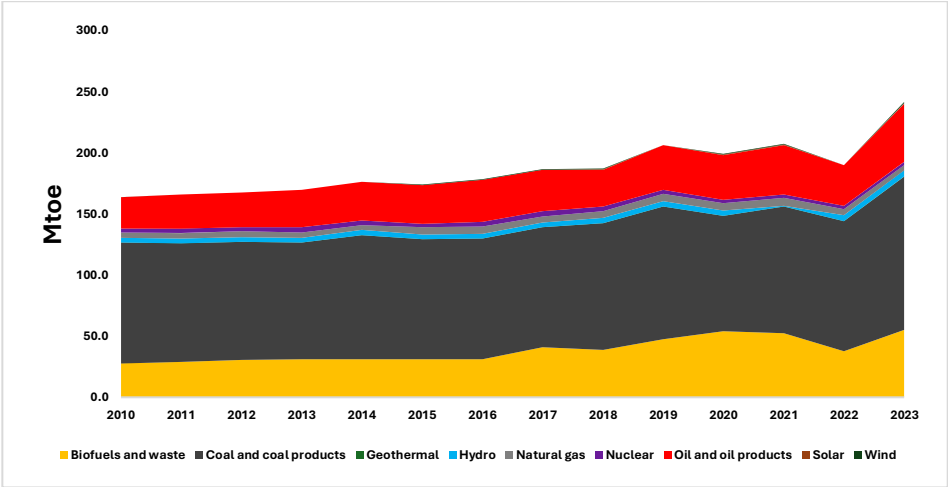
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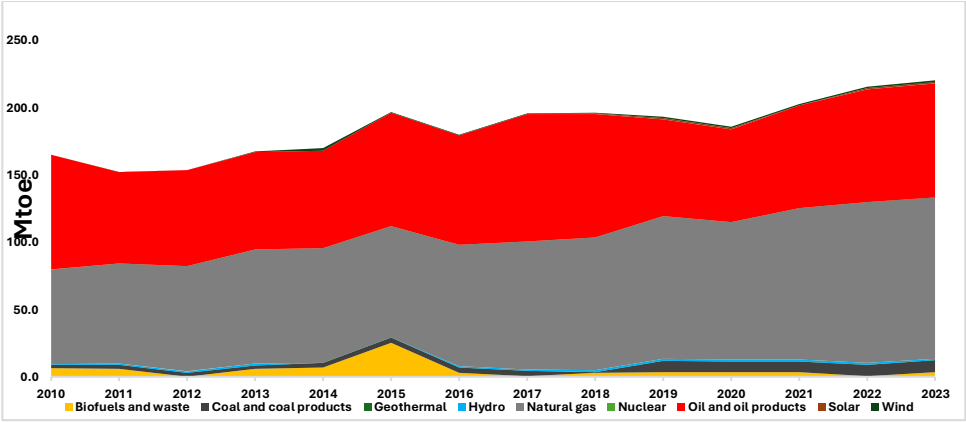
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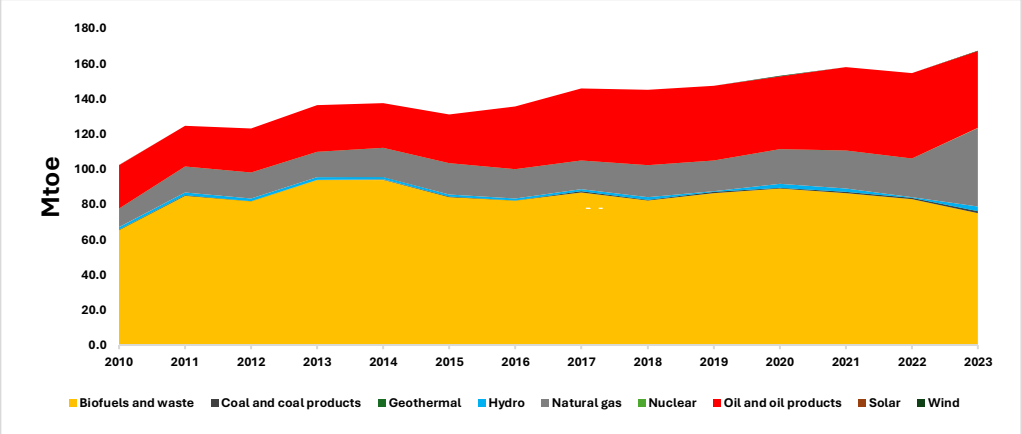
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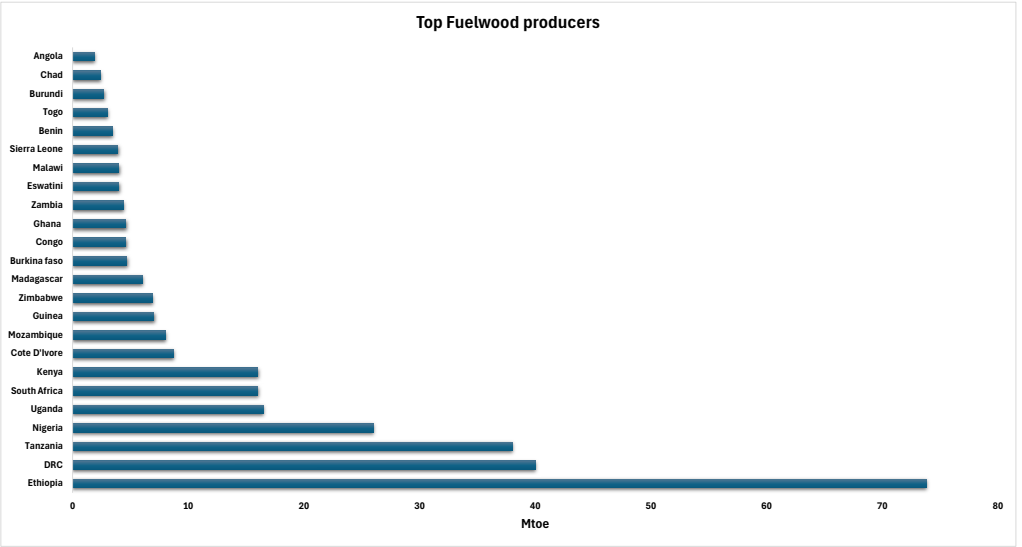
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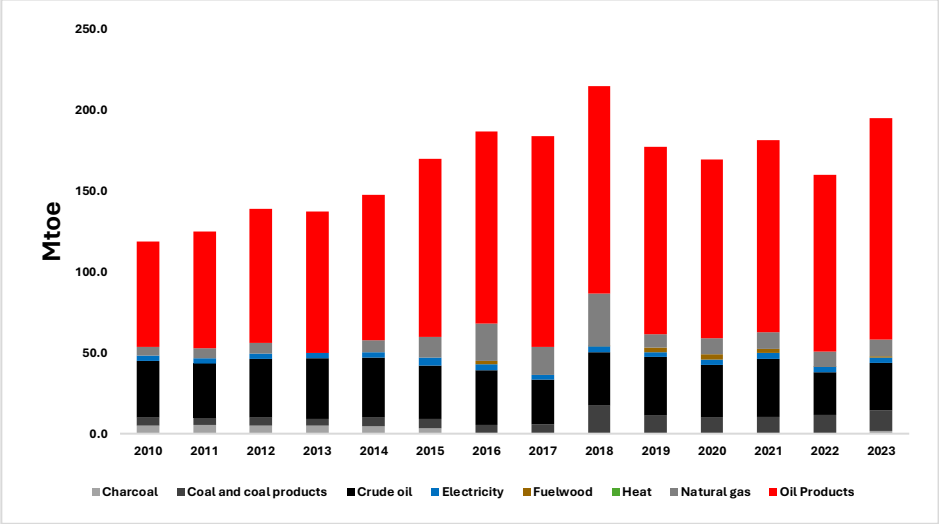
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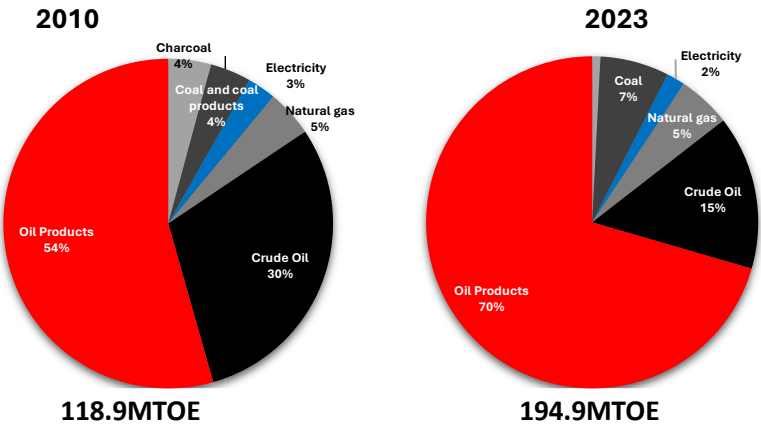
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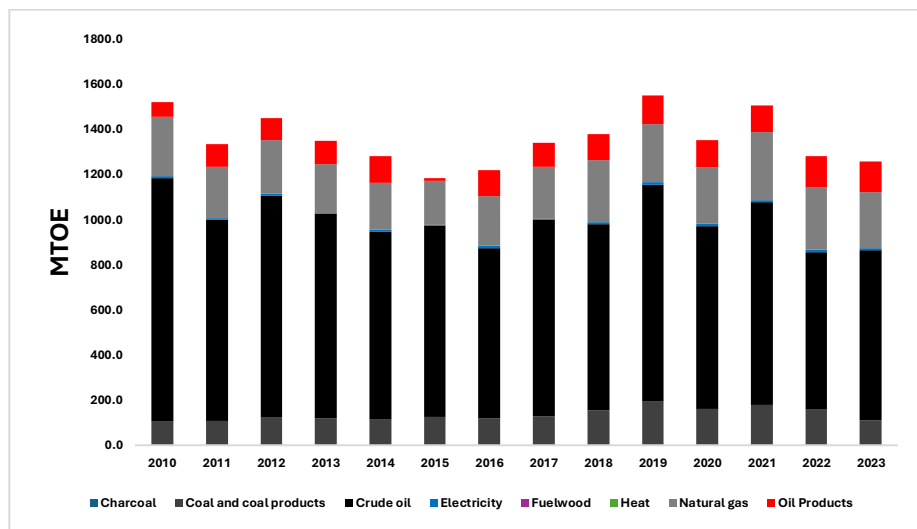
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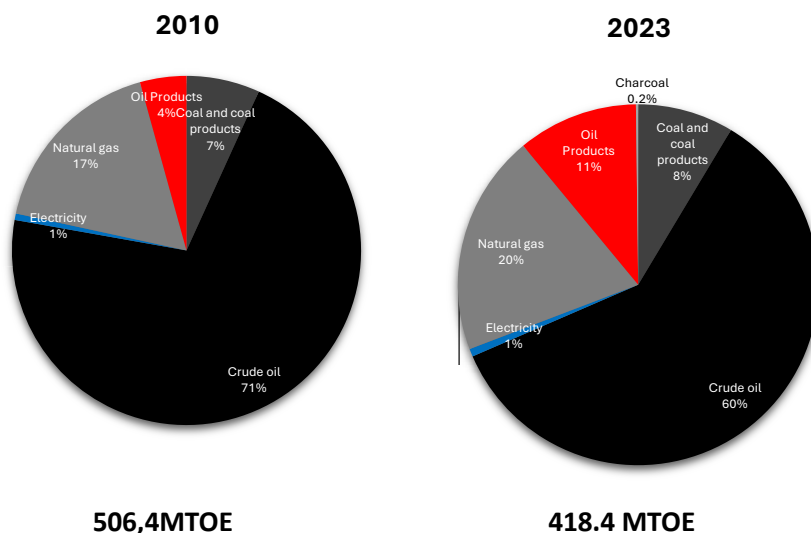
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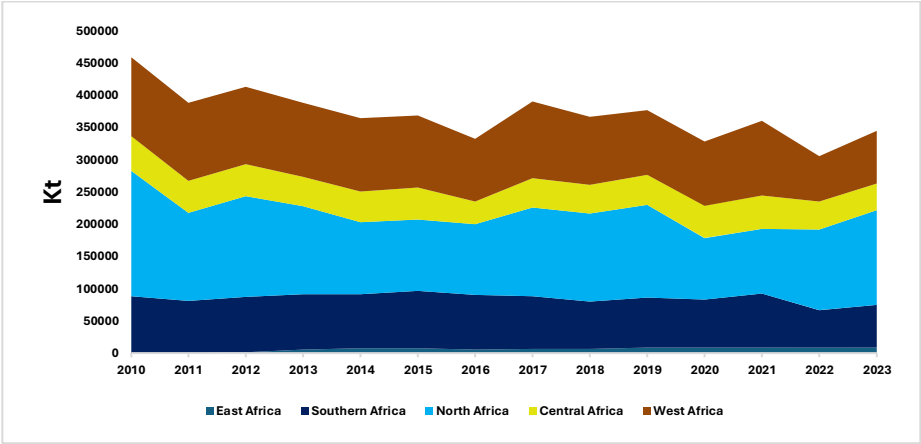
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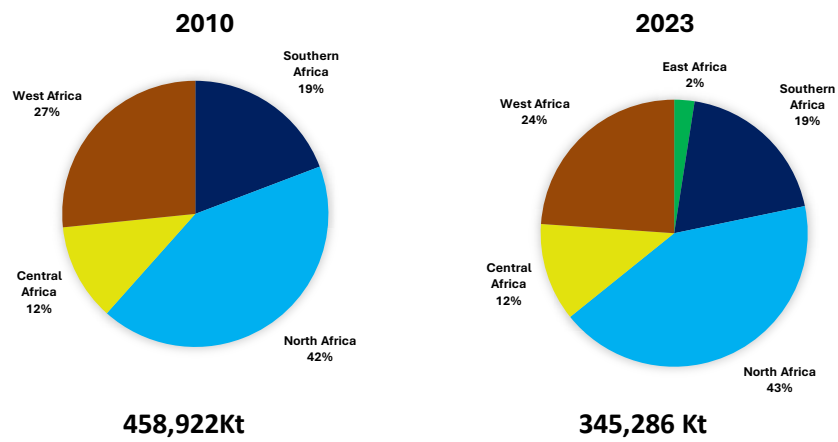
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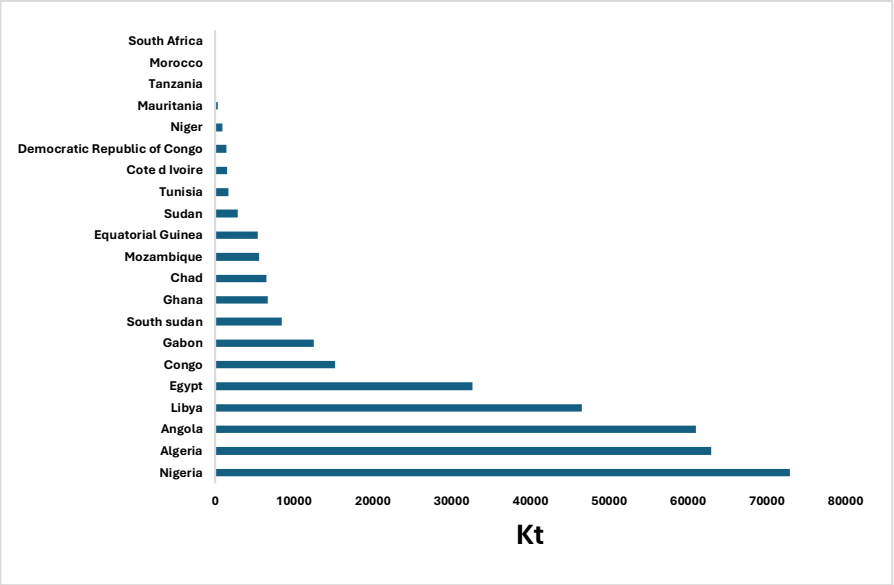
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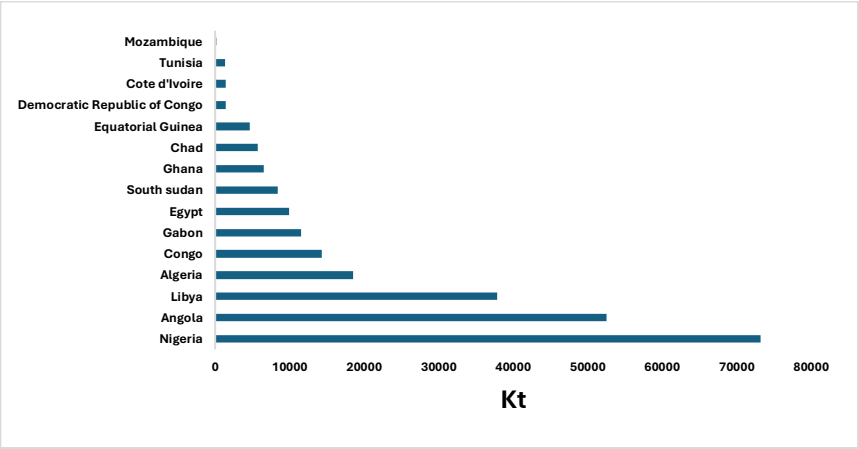
* Include crude oil, NGL, additives and other hydrocarbons



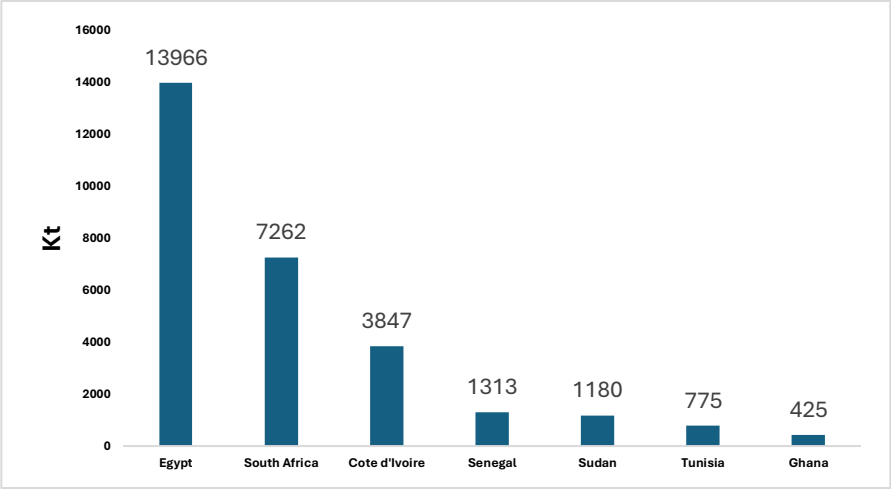
1.6.1 CRUDE OIL PRODUCING COUNTRIES



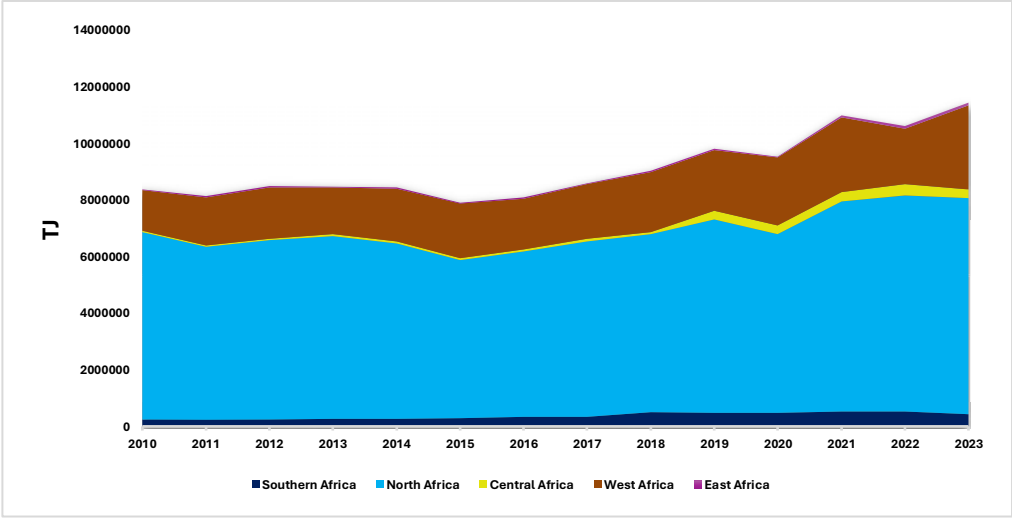
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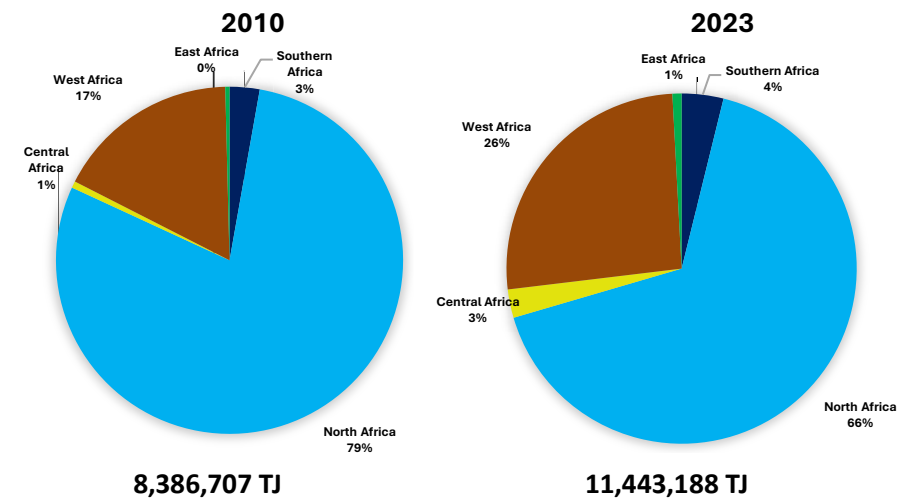
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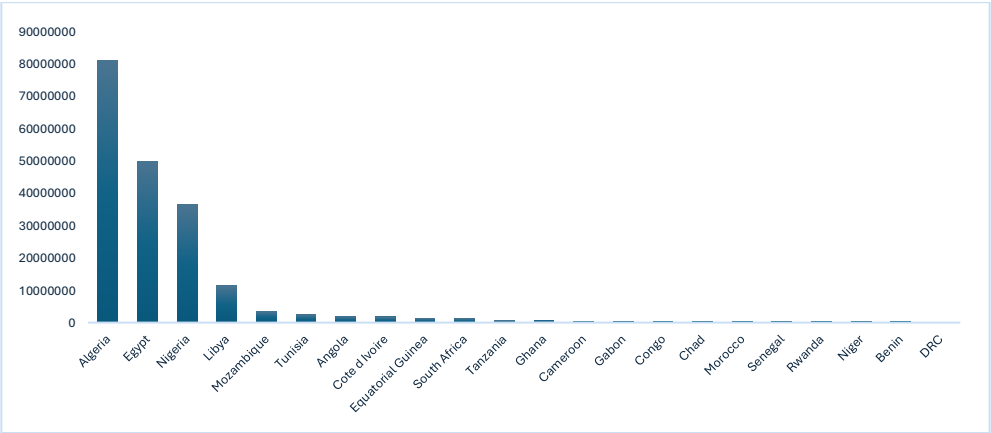
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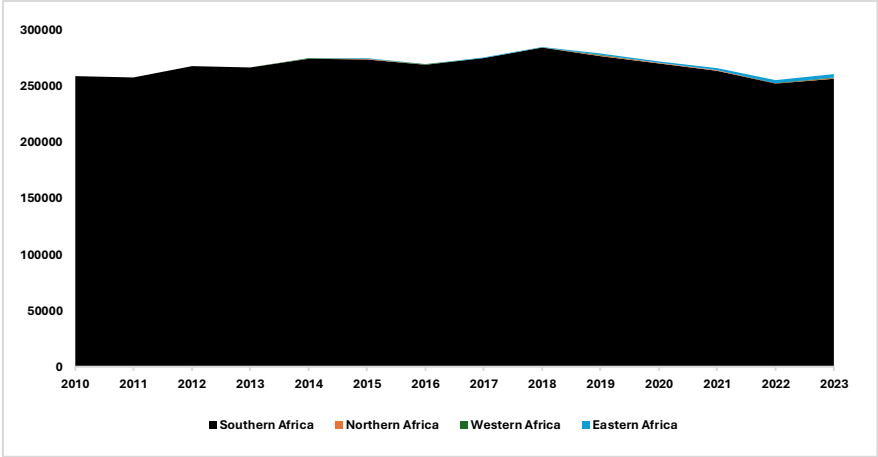
1.7.1 NATURAL GAS PRODUCTION SHARE BY REGION
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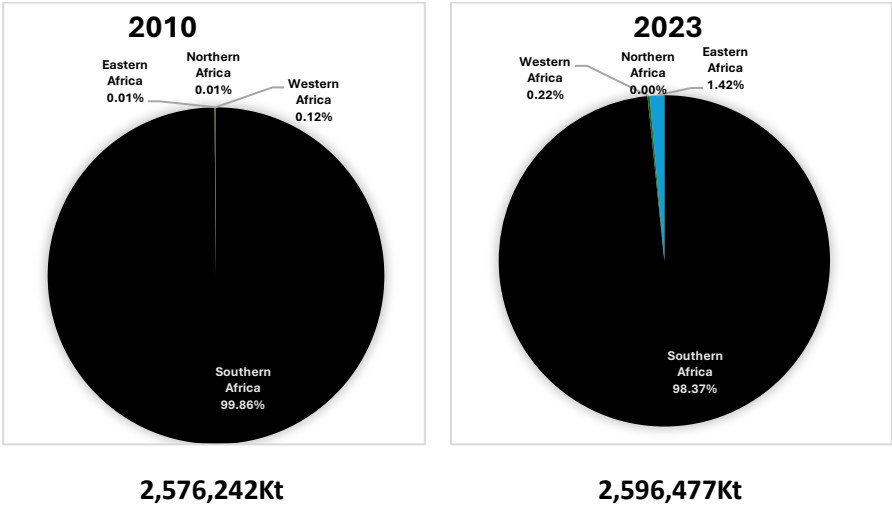
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1.8 COAL PRODUCTION (Kt)

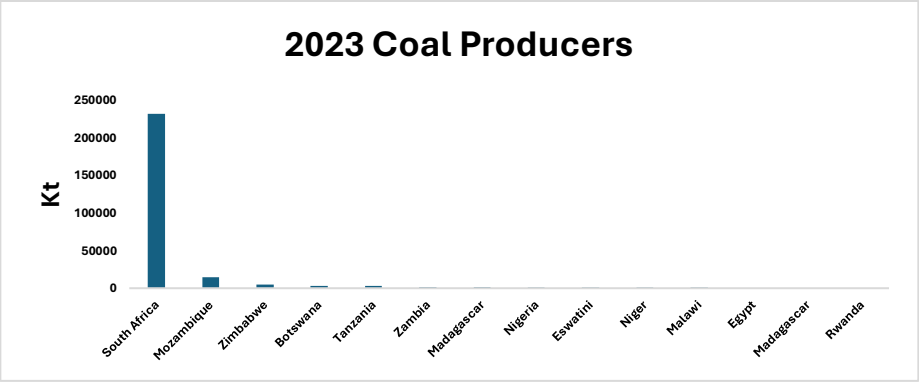


1.8.1 COAL PRODUCTION SHARE BY REGION 2010 vs 2023



* Includes steam coal, coking coal, lignite and recovered coal, etc.

1.8.2 PRODUCERS OF COAL FROM 2023

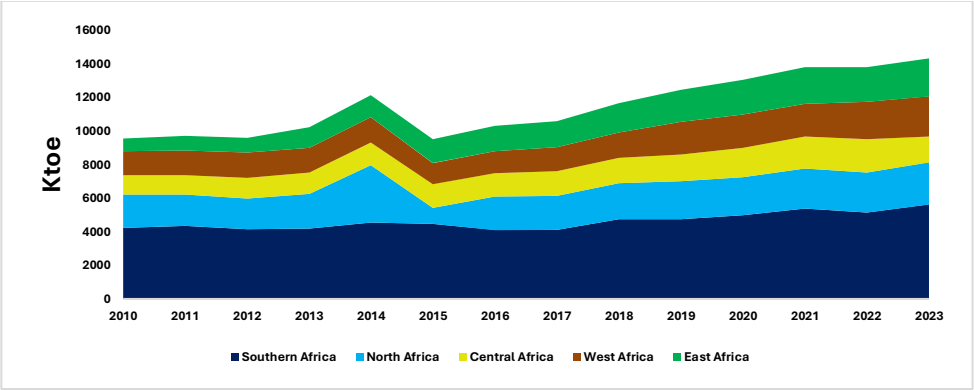


1.9 NUCLEAR PRODUCTION

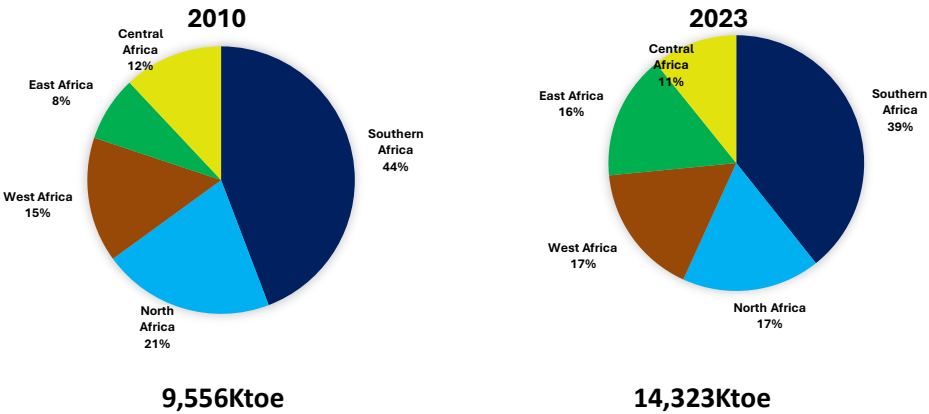
South Africa is currently the only country in Africa that is producing electricity using Nuclear Energy.



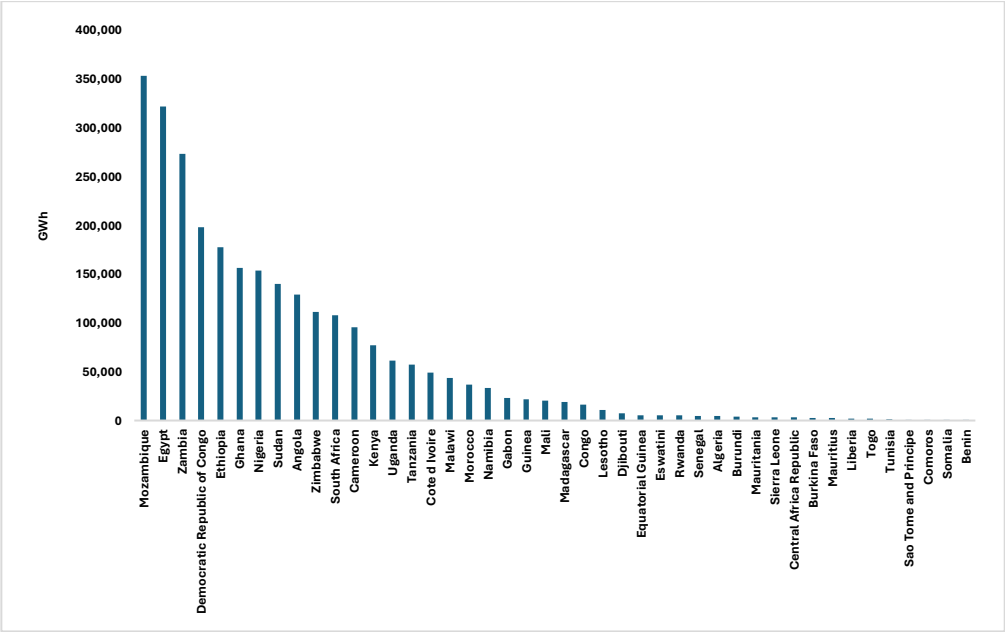
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10.1 HYDRO ELECTRICITY PRODUCTION SHARE BY REGION 2010 vs 2023

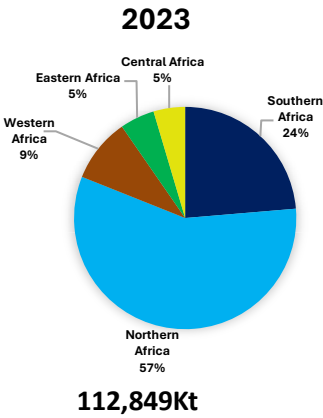
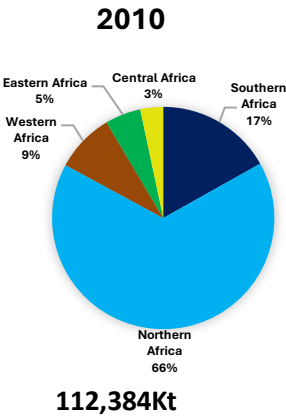
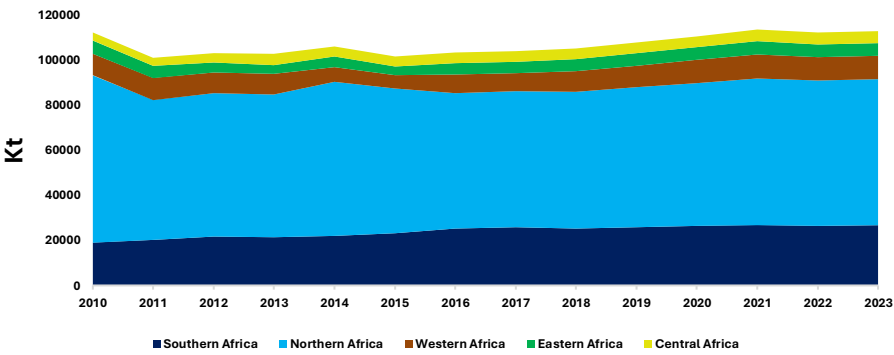


1.10.2 PRODUCERS OF HYDROELECTRICITY FROM 2023



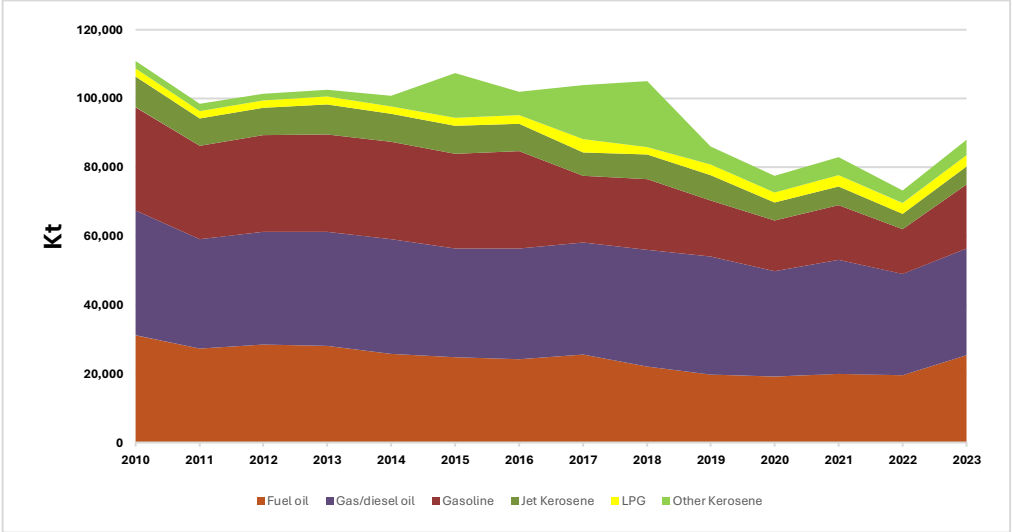
2. TRANSFORMATION

2.1 REFINERY PRODUCTION BY REGION

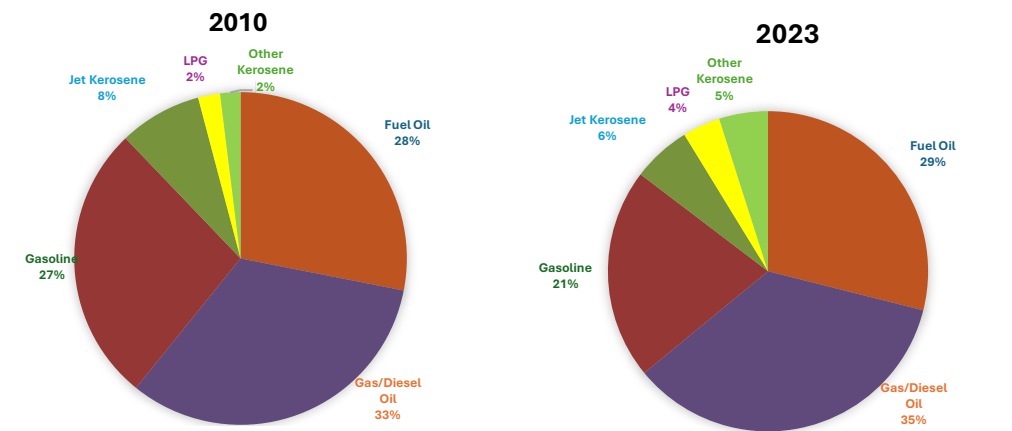


	Refining Capacity	kbpd
1.	Nigeria	1 155
2.	Egypt	675
3.	Algeria	576
4.	South Africa	497
5.	Libya	380
6.	Sudan	105
7.	Côte d'Ivoire	70
8.	Angola	55
9.	Ghana	45
10.	Tunisia	34
11.	Senegal	27
12.	Zambia	24
13.	Congo	21
14.	Gabon	21
15.	Niger	20
16.	Chad	20
	Africa	3 723

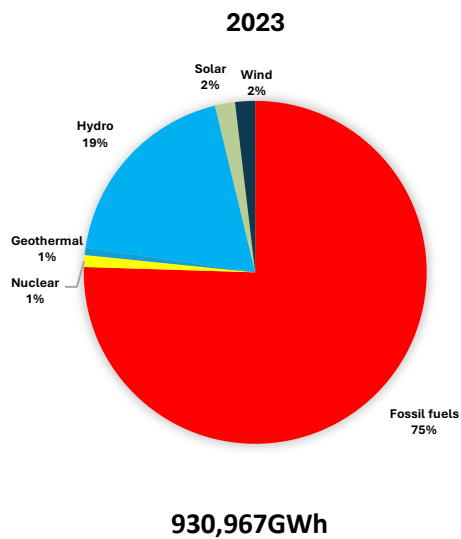
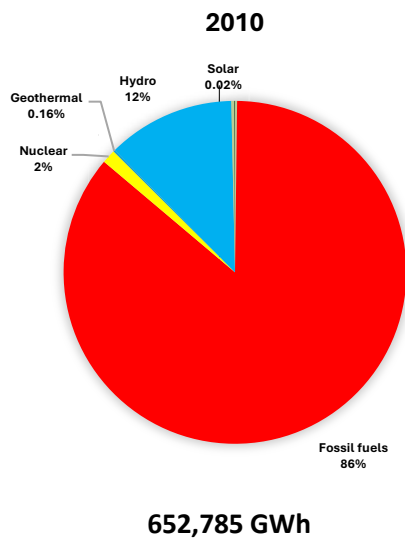
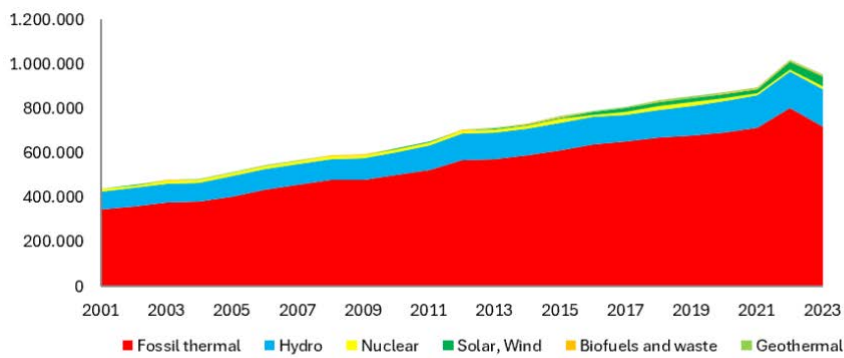
2.1.1 REFINING PRODUCTION BY FUEL



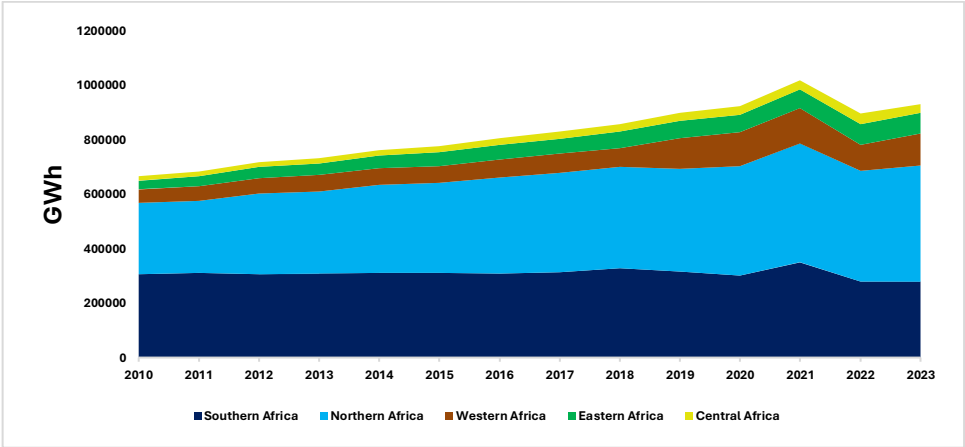
2.1.2 REFINERY PRODUCTION SHARE 2010 vs 2023



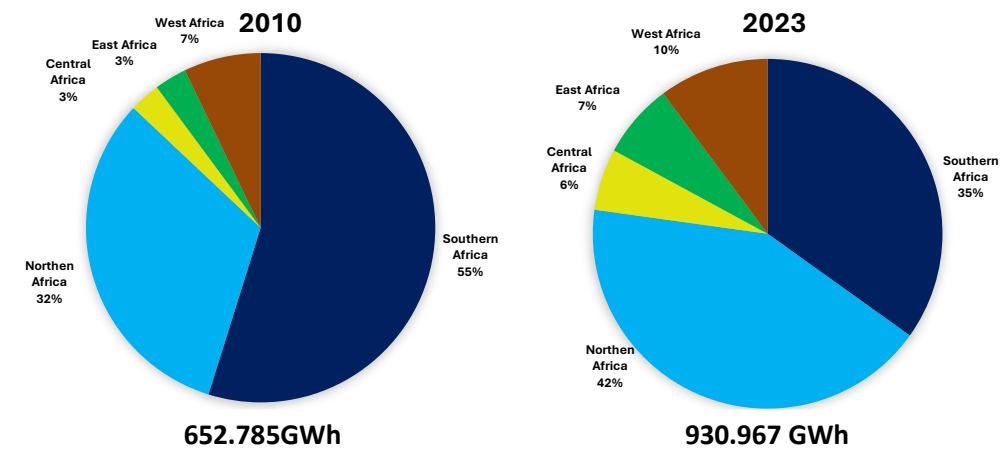
2.2 ELECTRICITY GENERATION BY FUEL



2.3 ELECTRICITY GENERATION BY REGION

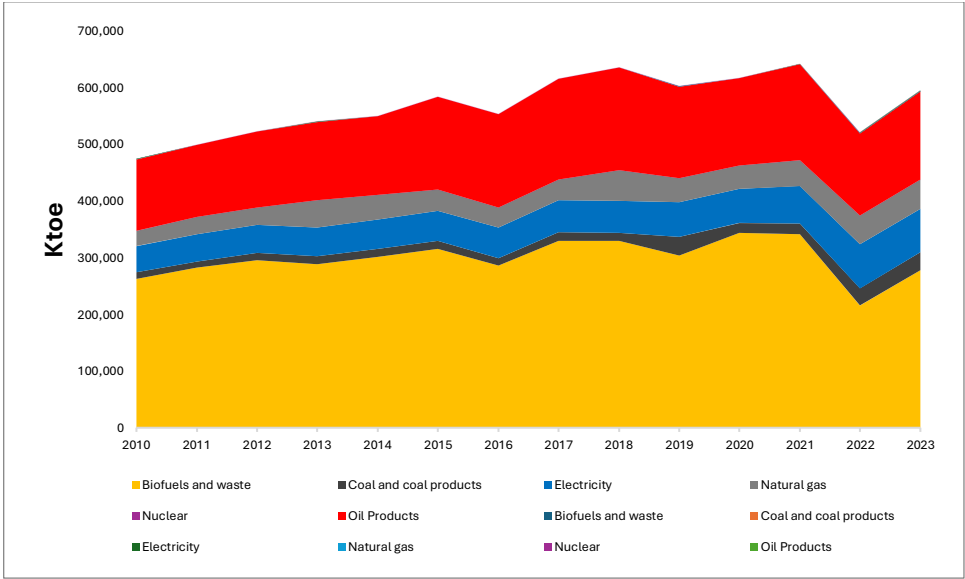


2.3.1 Regional Shares of Electricity Generation 2010 vs 2023

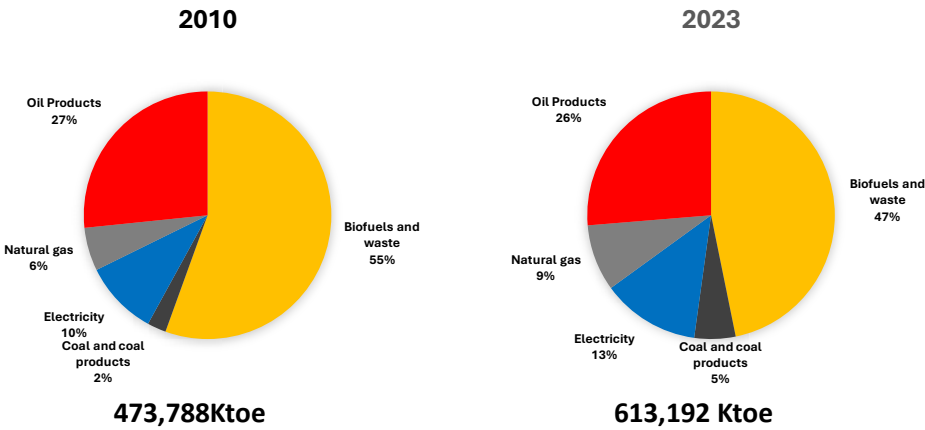


3. TOTAL FINAL CONSUMPTION

3.1 TOTAL FINAL CONSUMPTION BY FUEL

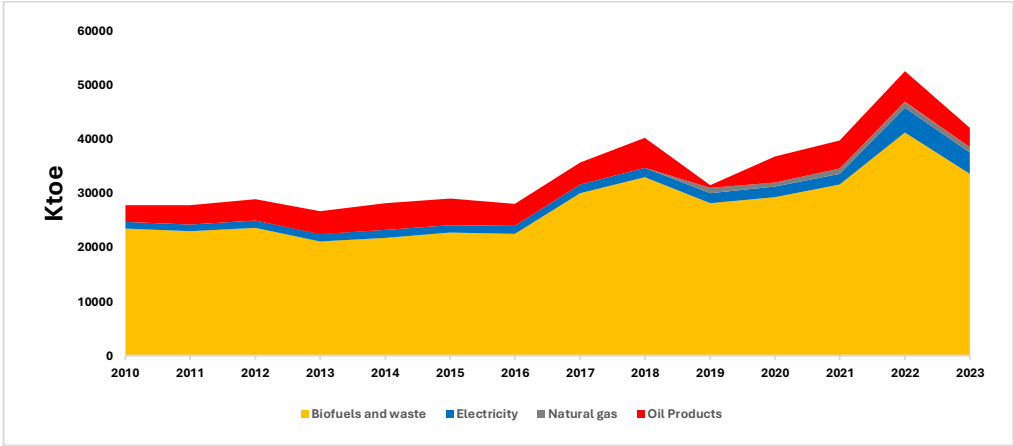


3.2 Fuel Shares of Total Final Consumption 2010 vs 2023

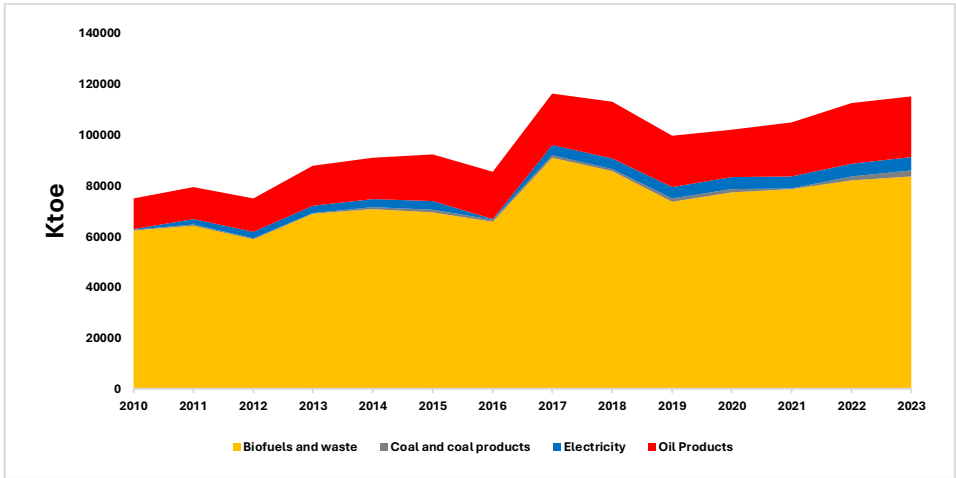


3.3 TOTAL FINAL CONSUMPTION REGIONS

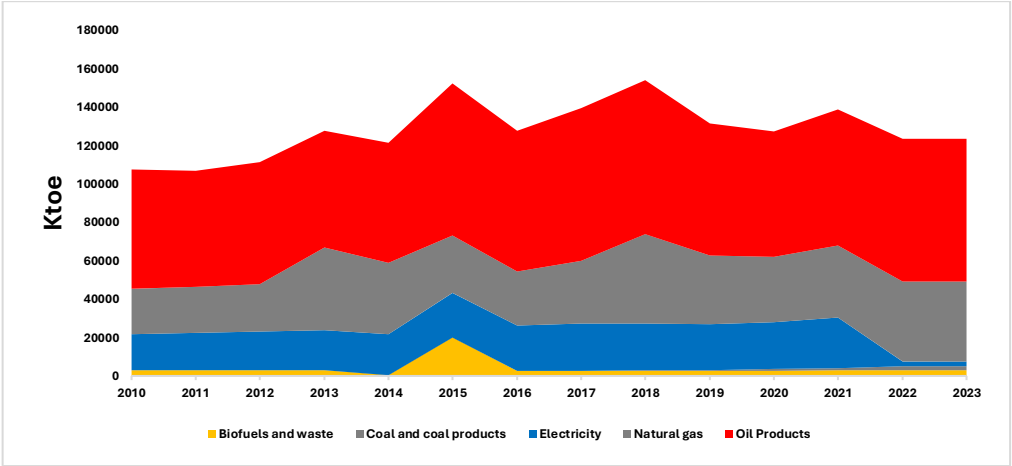
3.3.1 Central Africa TFC by fuel



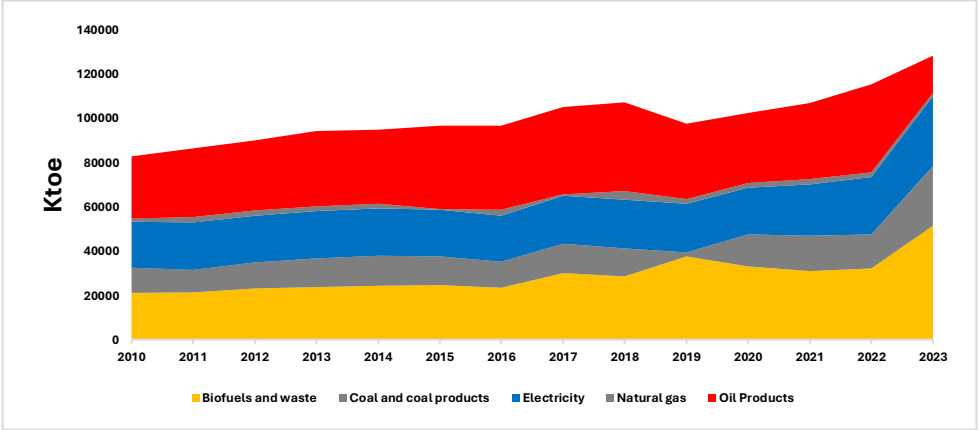
3.3.2 Eastern Africa TFC by fuel



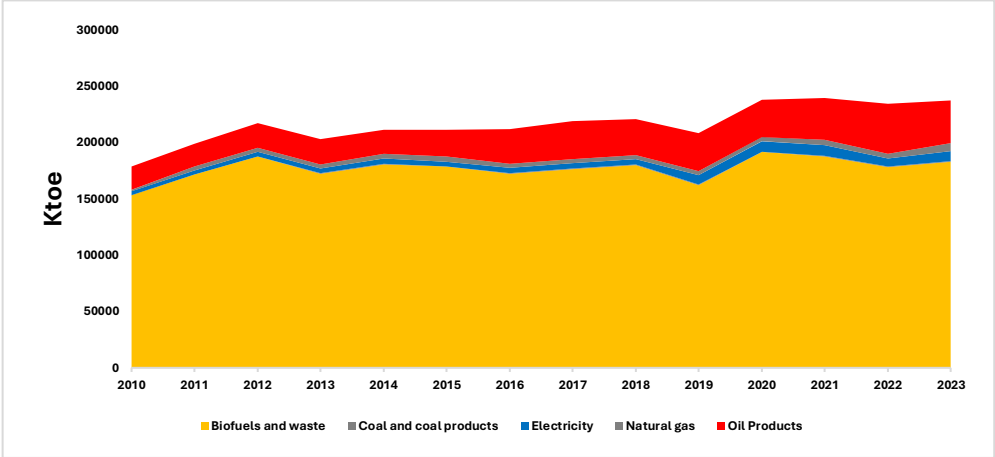
3.3.3 Northern Africa TFC by fuel



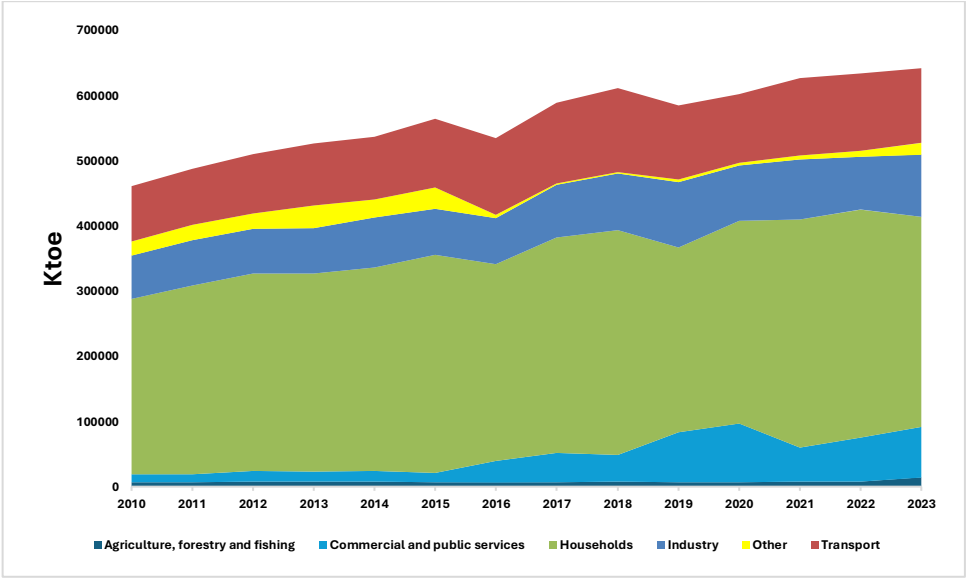
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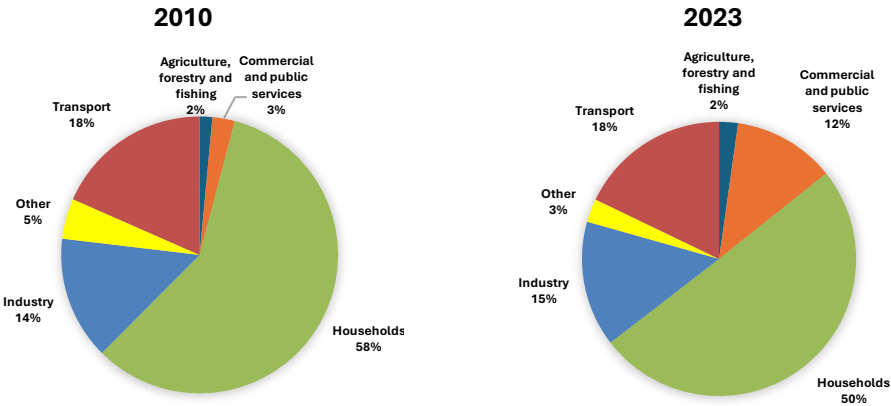
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3.4 AFRICA TOTAL FINAL CONSUMPTION BY SECTOR

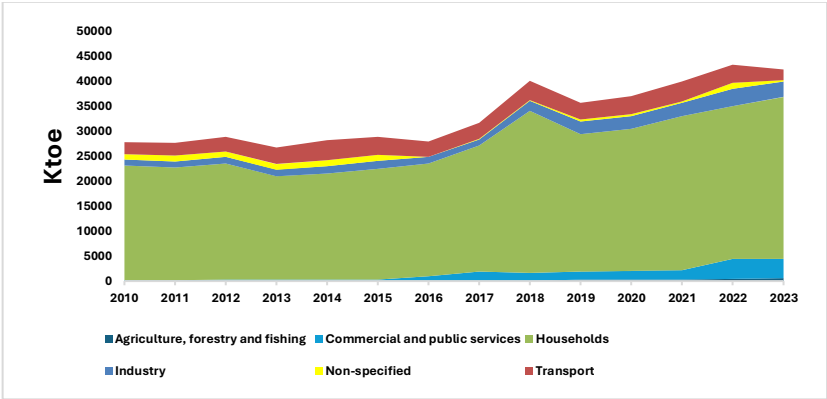


3.4.1 The share of TFC by sector 2010 vs 2023

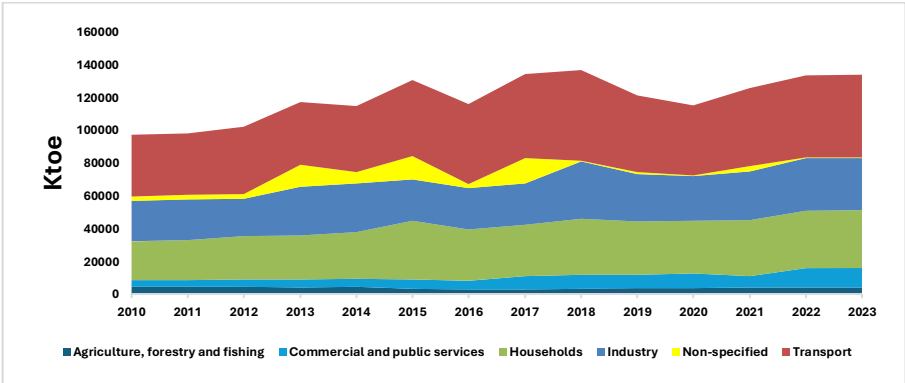


3.4 REGIONAL TOTAL FINAL CONSUMPTION BY SECTOR

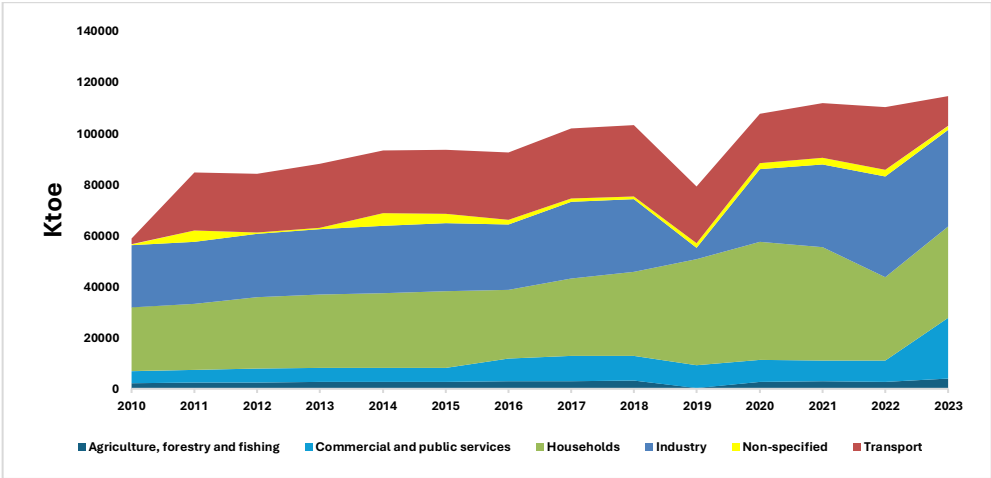
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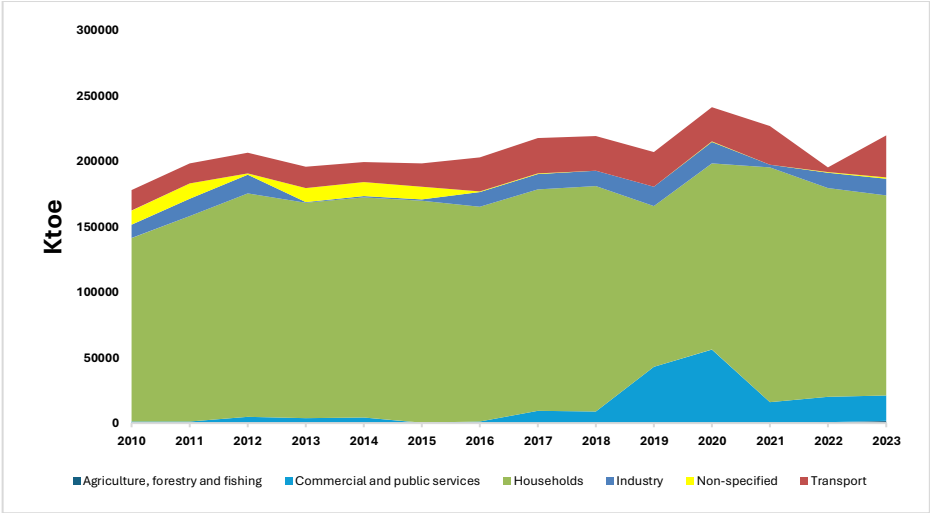
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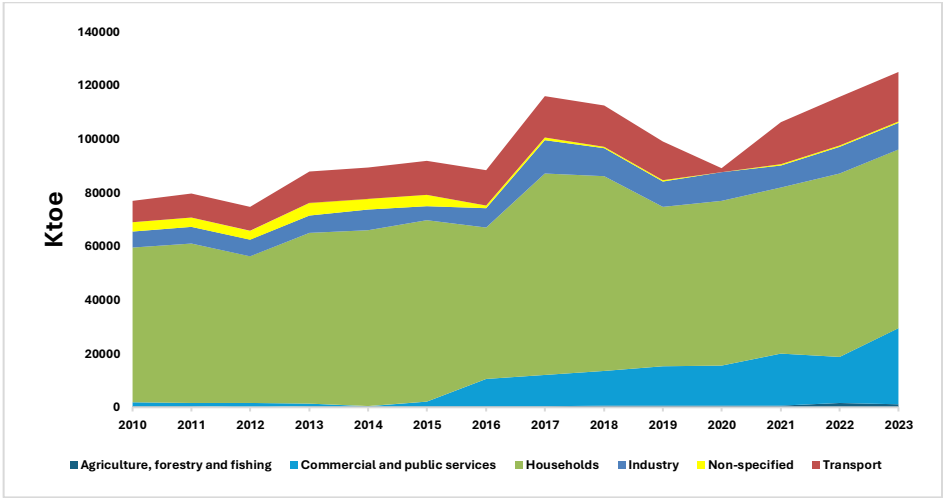
3.4.3 Southern Africa Total Final Consumption by Sector



3.4.4 Western Africa Total Final Consumption by Sector



3.4.5 Eastern Africa Total Final Consumption by Sector



SIMPLIFIED ENERGY BALANCE TABLE. 2000

Thousand Tonnes of Oil Equivalent (ktoe)		Crude Oil ₁	Oil Products	Coal / peat ₂	Natural Gas	Nuclear	Hydro	Wind & Geothermal & Solar PV	Biofuels and Waste	Electricity	Total
PRIMARY SUPPLY	Production	361 087	-	117 811	34 537	3 390	6 698	394	162 066	-	685 982
	Imports	22 288	34 534	4 108	847	-	-	-	4 397	2 636	68 810
	Exports	-265 250	-48 292	-36 006	-5 072	-	-	-	-	-1 445	-356 064
	Intl. Marine Bunkers	-	2 402	-	-	-	-	-	-	-	2 401
	Intl. Aviation Bunkers	-	-5 417	-	-	-	-	-	-	-	-5 417
	Stock Changes	-877	637	934	-	-	-	-	-	-	694
	TPES ₃	117 248	-16 135	86 846	30 312	3 390	6 698	394	166 463	1 191	396 406
TRANSFORMATION	Transfers	-12 686	21 505	-	-	-	-	-	-	-	8 819
	Statistical difference.	-2 917	-5 799	-46	-1 447	-	-	-	23 297	260	14 040
	Transformation	-100 266	84 907	-74 204	-16 162	-3 390	-6 698	-394	-48 777	37 853	-127 131
	Electricity Producers	-143	-11 172	-53 406	-14 765	-3 390	-6 698	-394	-1 193	37 853	-53 306
	Petroleum Refineries	-100 123	96 019	-	-	-	-	-	-	-	-4 104
	Charcoal Plants	-	-	-	-	-	-	-	-47 584	-	-47 584
	Gas-To-Liquids	-	-	-	-	-	-	-	-	-	-
FINAL CONSUMPTION	Coal-To-Liquids	-	-	-	-	-	-	-	-	-	-
	Blast Furnaces	-	-	-	-	-	-	-	-	-	-
	Other Transformation	-	60	-20 798	-1 398	-	-	-	-	-	-22 136
	Energy Industry Own Use	-406	-389	-28	-4 029	-	-	-	-	-3 784	-8 608
	Losses	-947	-2	-2 044	0	-	-	-	-	-4 817	-5 766
	TFC ₄	26	84 687	12 689	8 673	-	-	-	140 983	30 704	277 762
	Industry	26	13 009	6 782	4 712	-	-	-	5 586	14 854	44 970
FINAL CONSUMPTION	Transport	-	52 866	8	0	-	-	-	-	529	53 403
	Households	-	12 200	789	445	-	-	-	124 412	8 332	146 178
	Com. & Public Service	-	1 537	566	40	-	-	-	2 426	3 993	8 561
	Agriculture/Forestry	-	2 592	351	-	-	-	-	-	918	3 861
	Others (Non Specified)	-	872	5	493	-	-	-	8 558	2 078	12 006
	Non-Energy Use	-	1 611	4 187	2 984	-	-	-	-	-	8 783

SIMPLIFIED ENERGY BALANCE TABLE. 2010

Thousand Tonnes of Oil Equivalent (ktoe)		Crude Oil	Oil Products	Coal and Coal Products	Natural Gas	Nuclear	Hydro	Wind & Geothermal & Solar PV	Biofuels & Waste	Electricity	Total
PRIMARY SUPPLY	Production	465190.55		132423.14	169397.64	3152.51	9655.96	1502.06	290872.88		1072094.7
	Imports	35352.31	64908	4734.14	5519.61				5062.71	3280.71	110857.48
	Exports (-)	-378688.16	-21859.01	-34569.46	-87729.6				0	-2941.84	-525788.0
	International Marine Bunkers (-)		11500.19								11500.19
	International Aviation Bunkers (-)		-5778.92								-5778.92
	Stock Changes (+ draw, - build)	1556.24	822.24	-35.76	0						2342.72
	TYPES	123410.94	49592.5	102582.06	87187.65	3152.51	9655.96	1502.06	295935.59	338.87	673228.14
TRANSFORMATION	Transfers	-12238.15	16956.77								4718.62
	Statistical Difference	3614.07	-37706.21	1162.26	-147.09	0	0	0	40316.05	586.71999999	7825.7996
	Transformation	-113931.07	97590.04	-31592.83	-47245.01	-3152.51	-9655.96	-1502.06	-73161.23	57367.68	-175163.8
	Electricity Producers	-683.6	-16422.07	-68194.29	-44180.96	-3152.51	-9655.96	-1502.06	-1417.62	57387.68	-87721.39
	Petroleum Refineries	-113248.07	114012.11								764.03996
	Charcoal Plants								-71743.61		-71743.61
	Gas-To-Liquids	0			-11.79						-11.79
	Coal-To-Liquids	0		0							0
	Blast Furnaces			0							0
	Other Transformation	0	0	-13398.64	-3052.26				0		-16450.9
FINAL CONSUMPTION	Energy Industry Own Use	-476.03	-502.68	-10498.31	-12779.15				0	-4242.63	-28498.8
	Losses	-379.16	-4.21	0	-221.98				0	-7927.99	-8533.34
	Total Final Consumption	0	125926.21	11623.08	26794.42				263090.41	40142.65	473576.77
	Industry	0	14821.7	7630.46	12381.38				11022.55	20341.81	66197.9
	Transport		84518.56	6.64	1327.76				0	396.47	86249.43
	Households		14113.65	1544.94	4693.64				234443.09	14410.22	269205.54
	Com. & Public	0	1695.04	865.96	145.38				1232.92	8140.21	12079.51
FINAL CONSUMPTION	Agriculture Forestry	0	4935.95	232.97	32.67				0	1634.85	6836.44
	Others (Non Specified)	0	3324.74	291.21	515.79				16391.85	1219.09	21742.68
	Non-Energy Use	0	2516.57	1050.9	7697.8						11265.27

SIMPLIFIED ENERGY BALANCE TABLE. 2022

Thousand Tonnes of Oil Equivalent (ktoe)		Crude Oil ₁	Oil Products	Coal / peat ₂	Natural Gas	Nuclear	Hydro	Wind & Geothermal & Solar PV	Biofuels and Waste	Electricity	Total
PRIMARY SUPPLY	Production	321 615	-	131 257	226 041	3 541	14 521	9 042	289 980	-	995 998
	Imports	16 611	127 364	9 302	8 349	-	-	-	-	1821	163 447
	Exports	-238 328	-38 974	-46 339	-85 675	-	-	-	-	-1838	-411 154
	Intl. Marine Bunkers	-	-8 147	-	-	-	-	-	-	-	-8 147
	Intl. Aviation Bunkers	-	-6 775	-	-	-	-	-	-	-	-6 775
	Stock Changes	7090	5 777	-	46	-	-	-	-	-	12 914
	TPES ₃	106 988	79 245	94 221	148 762	3 541	14 521	9 042	289 980	-17	746 283
TRANSFORMATION	Transfers	-10 215	4 153	-	-	-	-	-	-	-	-6 063
	Statistical difference.	-2 770	19 151	17 709	-6 605	-	-	-	-617	-5 746	21 121
	Transformation	-94 003	72 240	-82 161	-75 348	-3 541	-14 521	-9 042	-163 360	81 932	-287 805
	Electricity Producers	-857	-12 590	-69 320	-73 399	-3 541	-14 521	-9 042	-13 884	81 932	-115 223
	Petroleum Refineries	-93 145	84 830	-	-	-	-	-	-	-	-8 315
	Charcoal Plants	-	-	-	-	-	-	-	-149 476	-	-149 476
	Gas-To-Liquids	-	-	-	-	-	-	-	-	-	-
	Coal-To-Liquids	-	-	-	-	-	-	-	-	-	-
	Blast Furnaces	-	-	-	-	-	-	-	-	-	-
	Other Transformation	-	-	-12 841	-1 949	-	-	-	-	-	-14 791
FINAL CONSUMPTION	Energy Industry Own Use	-	-553	-15 199	-15 194	-	-	-	-	-5 554	-36 500
	Losses	-	-66	-	-1 107	-	-	-	-	-11 115	-12 288
	TFC ₄	-	174 170	14 569	50 506	-	-	-	206 210	59 500	504 955
	Industry	-	19 066	12 415	20 564	-	-	-	11 356	22 002	85 404
	Transport	-	121 617	7	1 704	-	-	-	-	528	123 856
	Households	-	14 768	149	13 245	-	-	-	165 882	21 129	215 172
	Com. & Public Service	-	4 631	722	2 249	-	-	-	28 972	12 346	48 920
	Agriculture/Forestry	-	3 323	-	750	-	-	-	-	1 573	5 646
	Others (Non Specified)	-	1 288	1 277	11 995	-	-	-	-	1 922	16 482
	Non-Energy Use	-	9 477	-	-	-	-	-	-	-	9 477

CONVERSION FACTORS FOR ENERGY

	TJ	Gcal	Mtoe	MBtu	GWh
TJ	1	238.8	2.388×10^{-5}	947.8	0.2778
Gcal	4.1868×10^{-3}	1	10^{-7}	3.968	1.163×10^{-3}
Mtoe	4.1868×10^6	10^7	1	3.968×10^7	11630
MBtu	1.0551×10^{-3}	0.252	2.52×10^{-8}	1	2.931×10^{-4}
GWh		3.6	860×10^{-5}	3412	1

CONVERSION FACTORS FOR MASS

	kg	t	lt	st	lb
kilogram (kg)	1	0.001	9.84×10^{-4}	1.102×10^{-3}	2.2046
ton (t)	1 000	1	0.984	1.1023	2 204.6
long ton (lt)	1 060	1.016	1	1.120	2 240.0
short ton (st)	907.2	0.9072	0.893	1	2 000.0 ⁴
pound (lb)	0.454	4.54×10^{-4}	4.46×10^{-4}	5.0×10^{-4}	1



CONVERSION FACTORS FOR VOLUME

	gal U.S.	gal U.K.	bbl	Ft ³	l	m ³
U.S. gallon (gal)	1	0.8327	0.02381	0.1337	3.785	0.0038
U.K. gallon (gal)	1.201	1	0.02859	0.1605	4.5466	0.0045
barrel (bbl)	42.0	34.97	1	5.615	159.0	0.159
cubic foot (ft ³)	7.48	6.229	0.1781	1	28.3	0.0283
litre(l)	0.2642	0.220	0.0063	0.0353	1	0.001
cubic metre (m ³)	264.2	220.0	6.289	35.3147	1 000	1

Coal/peat

Coal/peat includes all coal primary (including hard coal and lignite) and derived fuels (including patent fuel, coke oven coke, gas coke, BKB, gas works gas, coke oven gas, blast furnace gas and other recovered gases). Peat is also included in this category.

Hard coal

Hard coal comprises anthracite coking coal and other bituminous coal.

Steam coal

Steam coal comprises anthracite, other bituminous coal and sub-bituminous coal.

Crude oil

Crude oil comprises crude oil, natural gas liquids, refinery feedstock and additives as well as other hydrocarbons.

Oil products

Oil products comprise refinery gas liquids, refinery feedstock and additives as well as other hydrocarbons.

Oil products

Oil products comprise refinery gas, ethane, LPG, aviation gasoline, motor gasoline, jet fuels, kerosene, gas/diesel oil, fuel oil, naphtha, white spirit, lubricants, bitumen, paraffin waxes, petroleum coke and other oil products.

Natural gas

Natural gas includes both “associated” and “non-associated” gas.

Nuclear

Nuclear shows the primary heat equivalent of the electricity produced by a nuclear power plant with an average thermal efficiency of 33%.

Hydro

Hydro shows the energy content of the electricity produced in hydro power plants; hydro output excludes output from pumped storage plants.

Biofuels and waste

Biofuels and waste comprise solid biofuels liquid biofuels, biogases, industrial waste and municipal waste. Biofuels are defined as any plant matter used directly as fuel or converted into fuels (e.g. charcoal) or electricity and/or heat. Included here are wood, vegetal waste (including wood waste and crops used for energy production), ethanol, animal materials/wastes and sulphites. Municipal waste comprises wastes produced by residential, commercial, and public services that are collected by local authorities for disposal in a central location for the production of heat and/or power.

Other

Other includes geothermal, solar, wind, tide/wave/ocean energy, electricity, and heat. Unless the actual efficiency of the geothermal process is known, the quantity of geothermal energy entering electricity generation is inferred from the electricity production at geothermal plants assuming an average thermal efficiency of 10% For solar, wind and tide/Wave/ocean energy, the quantities entering electricity generation are equal to the electrical energy generated. Direct use of geothermal and solar heat is also included here. Electricity is accounted for at the same heat value as electricity in final consumption (i.e. 1GWh = 0.000086 Mtoe). Heat includes heat that is produced for sale and is accounted for in the transformation sector.

Production

Production is the production of primary energy, i.e. hard coal, lignite, peat, crude oil, NGLs, natural gas, biofuels and waste, nuclear, hydro, geothermal, solar and the heat from heat pumps that is extracted from the ambient environment production is calculated after removal of impurities (e.g. sulphur from natural gas).

Imports and exports

Imports and exports comprise amounts having crossed the national territorial boundaries of the country, whether or not customs clearance has taken place.

a) Oil and natural gas

Quantities of crude oil and oil products imported or exported under processing agreements (i.e. refining on account) are included. Quantities of oil in transit are excluded Crude oil. NGL and natural gas are reported as coming from the country of origin; refinery feedstock and oil products are reported as coming from the country of last consignment Re-exports of oil imported for processing within bonded areas are shown as exports of product from the processing country to the final destination.

b) Coal/peat

Imports and exports comprise the amount of fuels obtained from or supplied to other countries, whether or not there is an economic or customs union between the relevant countries Coal in transit is not included.

c) Electricity

Amounts are considered as imported or exported when they have crossed the national territorial boundaries of the country.

International marine bunkers

International marine bunkers cover those quantities delivered to ships of all flags that are engaged in international navigation. The international navigation may take place at sea, on inland lakes and waterways, and in coastal waters. Consumption by ships engaged in domestic navigation is excluded. The domestic/International split is determined on the basis of port of departure and port of arrival, and not by the flag or nationality of the ship. Consumption by fishing vessels and by military forces is also excluded.

International aviation bunkers

International aviation bunkers cover deliveries of aviation fuels to aircraft for international aviation. Fuels used by airlines for their road vehicles are excluded. The

domestic/International split should be determined ON THE BASIS OF DEPARTURE AND LANDING LOCATIONS AND NOT BY THE NATIONALITY OF THE AIRLINE.

For many countries this incorrectly excludes fuel used by domestically owned carriers for their international departures.

Stock changes

Stock changes reflect the difference between opening stock levels on the first day of the year and closing levels on the last day of the year of stocks on national territory held by producers, importers, energy transformation industries and large consumers. A stock build is shown as a negative number, and a stock draw as a positive number.

Total primary energy supply (TPES)

Total primary energy supply (TPES) is made up of production + imports – exports – international marine bunkers – international aviation bunkers ± stock changes. For the world total, international marine bunkers and international aviation bunkers are not subtracted from TPES.

Transfers

Transfers includes both inter-product transfers, products transferred and recycled products.

Statistical differences

Statistical differences include the sum of the unexplained statistical differences for individual fuels, as they appear in the basic energy statistics. It also includes the statistical differences that arise because of the variety of conversion factors in the coal/peat and oil columns.

Electricity plants

Electricity plants refer to plants which are designed to produce electricity only. If one or more units of the plant is a CHP unit (and the inputs and outputs cannot be distinguished on a unit basis) then the whole plant is designated as a CHP plant. Both main activity producers and auto producer plants are included here.

Combined heat and power plants

Combined heat and power plants refers to plants which are designed to produce both heat and electricity. Sometimes referred to as cogeneration power stations.

If possible, fuel inputs and electricity/heat outputs are on a unit basis rather than on a plan basis. However, if data are not available on a unit basis, the convention for defining a CHP plan noted above is adopted. Both main activity producers and auto producer plants are included here.

Blast furnaces

Blast furnaces contain inputs to and outputs of fuels from blast furnaces.

Gas works

Gas works is treated similarly to electricity generation, with the quantity produced appearing as a positive figure in the coal/peat column or the natural gas column after blending with natural gas, inputs as negative entries in the coal/peat and oil products columns, and conversion losses appearing in the total column.

Coke ovens

Coke ovens contain losses in transformation of coal from primary to secondary fuel and from secondary to tertiary fuels (hard coal to coke and patent fuel, lignite to BKB, etc.).

Oil refineries

Oil refineries show the use of primary energy for the manufacture of finished oil products and the corresponding output. Thus, the total reflects transformation losses. In certain cases, the data in the total column are positive numbers. This can be due to either problem in the primary refinery balance or to the fact that the IEA uses regional net calorific values for oil products.

Petrochemical plants

Petrochemical plants cover backflows returned from the petrochemical industry. Note that backflows from oil products that are used for non-energy purposes (i.e. white spirit and lubricants) are not included here, but in non-energy use.

Liquefaction plants

Liquefaction plants include diverse liquefaction processes, such as coal liquefaction plants and gas-to-liquid plants.

Other transformation

Other transformation covers non-specified transformation not shown elsewhere, such as the transformation of primary solid biofuels into charcoal.

Energy industry own use

Energy industry own use contains the primary and secondary energy consumed by transformation industries for heating, pumping, traction and lighting purposes (ISIC 05. 06. 19 and 35. Group 091 and Classes 0892 and 0721).

Losses

Losses include losses in energy distribution, transmission, and transport.

Total final consumption (TFC)

Total final consumption (TFC) is the sum of consumption by the different end-use sectors; Backflows from the petrochemical industry are not included in final consumption.

Industry

Industry consumption is specified in the following subsectors (energy used for transport by industry is not included here but reported under transport):

- Iron and steel industry [ISIC Group 241 and Class 2431].
- Chemical and petrochemical industry [ISIC Divisions 20 and 21] excluding petrochemical feedstock.
- Non-ferrous metals basic industries [ISIC Group 242 and class 2432].
- Non-metallic minerals such as glass, ceramic, cement, etc. [ISIC Division 23]; - Transport equipment [ISIC Divisions 29 and 30]. - Machinery comprises fabricated metal product, machinery, and equipment

other than transport equipment [ISIC Divisions 25 to 28]

Industry (ctd.)

- Mining (excluding fuels) and quarrying [ISIC Divisions 07 and 08 and Group 099];
- Food and tobacco [ISIC Divisions 10 and 12];
- Paper, pulp and printing [ISIC Divisions 17 and 18];
- Wood and wood products (other than pulp and paper) [ISIC Division 16]; - Construction [ISIC Divisions 41 and 43];
- Textile and leather [ISIC Divisions 13 to 15];- non-specified (any manufacturing industry not included above) [ISIC Divisions 22. 31 and 32].

Transport

Transport includes all fuels used for transport [ISIC Divisions 39 to 51]. It includes transport in industry and covers domestic aviation, road, rail, pipeline transport, domestic navigation and non-specified transport. Fuel used for ocean, coastal and inland fishing (included under fishing and military consumption (included in other non-specified) are excluded from transport.

Please note that international marine and international aviation bunkers are also included here for world total.

Other

Other covers residential, commercial, and public services [ISIC Divisions 33. 36-39. 45-47. 52. 53. 56. 58-66. 68-75. 77-82. 84 (excluding Class 8422) 85-88. 90-99]. agriculture/forestry [ISIC Divisions 01 and 02] fishing [ISIC Division 03] and non-specified consumption.

Non-energy use

Non-energy use covers those fuels that are used as raw materials in the different sectors and are not consumed as a fuel or transformed into another fuel. Non-energy use also includes petrochemical feedstock. Non-energy use is shown separately in final consumption under the heading non-energy use.

Notes



2025



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