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Annual Environmental Accounts Statistics-2025



NATIONAL STATISTICS BUREAU
ROYAL GOVERNMENT OF BHUTAN
THIMPHU: BHUTAN

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**ANNUAL ENVIRONMENTAL
ACCOUNTS STATISTICS-2025**

National Statistics Bureau

Royal Government of Bhutan

Thimphu: Bhutan

Foreword

The National Statistics Bureau (NSB) is pleased to publish the Annual Environmental Accounts Statistics (AEAS)-2025. The AEAS presents green economy indicators, and environmental accounts such as electricity, fossil fuel (diesel, petrol, liquid petroleum gas or LPG, and kerosene), and fuelwood. It also includes timber and mineral accounts covering the period from 2015 to 2024. Further, the publication presents additional chapters on experimental energy accounts. This is the 9th publication by the Economic and Environment Statistics Division of the National Statistics Bureau.

The AEAS is compiled using the framework of the System of Environmental–Economic Accounts (SEEA). We hope that the information in the report will be helpful in policy formulation, evaluation, and monitoring of economic development plans and programs.

The National Statistics Bureau would like to sincerely thank and acknowledge all agencies, both government and private sector, for their continued support and cooperation in the publication of this report. We would appreciate any feedback or comments on improving this report for the larger benefit of data users.

National Statistics Bureau

Thimphu

Abbreviations & Acronyms

DGM: Department of Geology & Mines

DoFPS: Department of Forest and Park Services

GDP: Gross Domestic Product

GNH: Gross National Happiness

GHG: Green House Gas

LPG: Liquefied Petroleum Gas

ATF: Aviation Turbine Fuel

MoENR: Ministry of Energy and Natural Resources

NSB: National Statistics Bureau

SEEA: System of Environmental- Economic Accounting

UNSD: United Nations Statistics Division

ISIC: International Standard Industrial Classification of all Economic Activities

SEEA-CF: System of Environmental-Economic Accounting 2012-Central Framework

UNESCAP: United Nations Economic and Social Commission for Asia and the Pacific

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Chapter 1: Introduction

1.1 Objective

The Annual Environmental Accounts Statistics (AEAS) is inspired by Article 5 of the Constitution of the Kingdom of Bhutan, which mandates the conservation of natural resources, prevention of ecosystem degradation, and maintenance of at least 60% forest cover at all times. Environmental conservation is a cornerstone of Gross National Happiness (GNH) and is woven into every policy and development plan in the country.

Various legal and policy documents, such as The Forest and Nature Conservation Act (1995), the National Forest Policy (2010), The National Environment Protection Act (2007), and the Five-Year Development Plans, emphasize the sustainable utilization and management of natural resources. Effective management of these environmental assets is essential for the sustainable use of our limited resources, ensuring that the environment continues to provide vital inputs to both the economy and society.

Against this backdrop, the AEAS aims to provide environmental information relevant to key economic sectors in Bhutan. The data and statistics presented in this report are intended to serve as a foundational resource for planners, policymakers, researchers, and other stakeholders, facilitating informed decision-making and policy development related to sustainable development and the green economy.

As part of our ongoing efforts, we are actively compiling and reporting on the state of the environment and resources used to inform decision-makers and shape long-term policies concerning environmental assets. The NSB is developing various environmental accounts in a phased manner, with plans to publish a comprehensive set of environmental economic accounts as data and capacity issues are addressed over time.

1.2. Method and Scope

The AEAS adopts the System of Environmental-Economic Accounting (SEEA) Central Framework in preparing and developing environmental economic accounts. The focus of the analysis is more on the physical quantities and values of environmental assets, and the changes in these assets over a period of time. The physical and monetary (value) changes record additions to the stock of environmental assets and new discoveries and reductions in the stock through extraction and natural losses.

The report, among others, focuses mainly on accounting for electricity and fossil fuels (diesel, petrol, LPG gas & kerosene). Other accounts, such as asset accounts for major mineral production by type, viz., coal, dolomite, limestone, gypsum, marble, quartzite, stone, and iron ore, are included. In addition, fuelwood consumption accounts are also developed in our efforts to develop a full set of energy accounts. The waste account and experimental energy accounts are presented, as these are growing concerns for the government. As part of additional asset accounts, timber resource accounts, aggregate stone, briquette, sand, and stone chips supplied by the Natural Resource Development Corporation (NRDCL) and the Department of Forest & Park Services (DoFPS) are also compiled. The measurement scope of environmental assets is not limited to these accounts, but as and when the data become available, the NSB shall extend its efforts to other natural resource accounts to help in policy planning.

1.3 Data Revision

As in any other statistical organization, the published figures are based on the revision of the recent available information. As the publication draws information from annual reports of companies and corporations, it may undergo revision in subsequent publications.

1.4 Reporting

The Environmental Accounts Statistics is reported on a calendar year basis.

Chapter 2: Green Economy Indicators

2.1 Overview

Green Economy or green growth is in the limelight of the global development agenda. There is a growing demand for green economy indicators, both from policymakers and decision makers. Green growth economy indicators are a pathway to sustainable development (World Bank, 2012). Thus, the NSB compiles relevant core indicators that will inform the policy makers and development partners on the state of our environment.

Table 1: Green Economic Indicators

Indicators	Web or table reference	Ministry or Statistical Office	Methodological sheet	Unit	2017	2018	2019	2020	2021	2022	2023	2024	
Economic, demographic and social context for sustainable development													
Demographic patterns and trends													
Total population, both sexes combined	Population Housing Census Report (PHCB)/SYB	NSB	Available	Nos	727,145.00	734,374.00	741,672.00	748,931.00	756,129.00	763,249.00	770,276.00	784,043.00	
Population growth rate		NSB	Available	%	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.79	
Percentage of urban population		NSB	Available	%	37.80	37.80	37.80	37.80	37.80	40.90	40.90	40.90	
Growth rate of urban population		NSB	Available	%	n.a	n.a	n.a	n.a	n.a	N/A	N/A	N/A	
Population (age 65 and above), total, both sexes		NSB	Available	Nos	43,064.00	44,338.00	45,822.00	47,433.00	49,085.00	50,715.00	52,308.00	43,064.00	
Population density, inhabitant per km2		NSB	Available	per km2	18.94	19.13	19.32	19.51	19.69	19.88	20.06	19.00	
Life expectancy at birth, both sexes combined		NSB	Available	Years	69.10	69.10	69.10	69.10	69.10	71.30	71.33	70.20	
Economic growth, structure of economy and productivity													
Real GDP, index	National Accounts Statistics Report	NSB	Available	%	-	3.50	5.76	(10.22)	4.42	5.21	4.63	7.50	
[base year as determined by the reporting country]				in Mil USD	2,592.32	2,582.94	2,735.67	2,457.36	2,767.98	2,898.27	3,012.78	3,299.84	
GDP per capita(in USD)				USD	3,524.32	3,517.20	3,688.52	3,281.16	3,660.72	3,833.03	3,911.29	4,245.68	
Net Disposable Income [or Net National Income]				Mil Nu	148,769.23	158,568.21	173,807.68	165,528.70	185,749.19	206,159.72	242,888.19	277,031.33	
Share of agriculture in GDP				%	12.93	13.55	12.93	15.70	15.79	14.67	14.96	14.15	
Share of industry/manufacturing in GDP				%	39.04	35.27	33.09	99.99	31.62	31.82	29.55	31.67	
Share of services in GDP				%	48.03	51.18	53.97	52.51	52.58	53.50	55.49	54.18	
Proportion of cellular subscribers to total population				SEI Report	SEI	Available	%	100.48	95.80	98.32	99.49	102.89	101.75
Proportion of internet users of total population	SEI	Available	%		99.86	106.21	110.37	98.10	99.40	98.47	97.57	102.75	
Labour													
Labour force participation	Labour Force Survey report, NSB	NSB	Available	%	63.27	62.60	66.40	67.80	69.10	63.10	65.00	63.90	
Proportion of employment by relevant economic activities				Available	Pry	166,646.00	167,862.24	159,032.00	157,015.00	158,511.00	125,160.00	158,707.04	154,512.00
					Second	63,852.00	35,748.44	43,550.00	42,438.00	45,560.00	39,414.00	49,723.83	60,484.00
					Trit	101,601.00	107,245.32	108,478.00	115,109.00	118,052.00	123,210.00	156,293.82	155,483.00
					Σ (in Nos)	332,099.00	310,856.00	311,059.00	314,562.00	322,123.00	287,784.00	364,724.69	370,479.00
Unemployment rate	NSB	Available	%	2.40	3.40	2.70	5.00	4.80	5.90	3.50	3.50		
Labour productivity [GDP per person employed]	NSB	Available	in Mil USD	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	
Poverty, income distribution and other social issues													
Income inequality: GINI coefficient	Poverty Analysis Report	NSB	Available		0.38	0.38	0.38	0.38	0.38	0.29	0.29	0.29	
Percentage of population living in poverty and extreme poverty [measured by National/Regional poverty lines]		NSB	Available	%	8.20	8.20	8.20	8.20	8.20	12.40	12.40	12.40	
Subsistence Poverty rate		NSB	Available	%	1.50	1.50	1.50	1.50	1.50	0.40	0.40	0.40	
Educational attainment: at least completed lower secondary (ISCED 2 or higher), population 25+ years (%)	Annual Education Statistics	MoE	Available	%	74.20	71.40	71.40	71.40	71.40	71.40	71.40	71.40	
Total net enrolment ratio in primary education [both sexes]		MoE	Available	%	94.80	92.90	91.20	92.94	93.51	93.30	94.27	88.83	
Total public expenditure on education as a percentage of GDP	Annual National Accounts Statistics	NSB	Available	%	6.72	6.49	5.32	7.39	6.12	6.35	4.81	4.36	
Total expenditure on health per capita (PPP)	Annual National Accounts Statistics	NSB	Available	Nu	5,994.70	6,623.52	6,547.53	8,592.79	8,608.74	8,528.43	8,244.30	8,834.81	

Indicators	Web or table reference	Ministry or Statistical Office	Methodological sheet	Unit	2017	2018	2019	2020	2021	2022	2023	2024
Inflation and commodity prices												
Consumer price index		NSB	Available	%	4.96	2.72	2.73	5.63	7.35	5.64	4.23	2.82
Export price of the major commodity groups [as determined by the reporting country]		DGPC	Available	Nu/unit as of Dec. 2017	THP/KHP=2.1 2, CHP=2.55	THP/KHP=2.1 2, CHP=2.55	THP/KHP=2.1 2 CHP=2.55	THP/KHP=2.1 2 CHP=2.55	THP/KHP=2.1 2 CHP=2.55	THP/KHP=2.2 3 CHP=2.55	THP/KHP=2.2 3 CHP=2.56	THP/KHP=2.2 3 CHP=2.56
International trade and tourism												
Relative importance of trade: (exports + imports)/GDP	Annual National Accounts Statistics	NSB	Available	Mil Nu	0.77	0.75	0.76	0.73	0.74	0.60	0.61	0.59
Terms of trade index [base year as determined by the reporting country]		DRC, MoF	Not available		n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
International tourist arrivals in % to population	Annual Report	TCB	Available	%	9.82	9.78	9.73	0.85	n.a	1.29	13.38	18.47
International tourism, receipts	Annual Report	RMA	Available	in Mil USD	79.81	85.41	88.63	9.49	n.a	n.a	n.a	n.a
The environmental and Resource Productivity												
Carbon emissions												
Carbon dioxide emissions (CO2), thousand metric tons of CO2 *	UNFCC Report	DECC	Available	Metric tons	3,266,610.00	3,404,190.00	3,306,050.00	4,006,380.00	4,769,620.00	4,544,310.00	3,883,930.00	3,974,780.00
Carbon dioxide emissions (CO2), metric tons of CO2 per capita		DECC	Available	Tons/Capita	4.49	4.64	4.46	5.35	6.31	5.95	5.04	5.07
Carbon dioxide emissions (CO2), kg CO2 per \$1 GDP (PPP)		DECC	Available	Kg/GDP	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Energy												
Energy Intensity [KToE per Million Nu.]	EAS Report	NSB	Available	ktoe/Nu	0.00	0.00	0.00	0.00	0.007	0.002	0.04	0.003
Energy consumption per capita [total or final]	energy per capita consumption	NSB	Available	Ktoe/person	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy productivity [Million Nu. Per KToE]	NAS Report	NSB	Available	Million Nu/ktoe	338.41	320.76	335.84	396.31	382.58	333.74	298.21	315.33
Renewable energy supply [total energy supply ,TES]		NSB	Available	GWh	7,721.43	6,594.31	8,875.75	11,390.37	10,823.40	11,001.37	10,536.44	11,656.09
Renewable electricity [% total electricity generation]	EAS Report	NSB	Available	%	99.99	99.98	99.98	99.98	99.98	97.75	99.99	99.97
Fuelwood, production [thousand cubic metres]	Annual Report	NRDCL/DoFPS	Available	1000 m3	132.20	80.31	95.59	89.01	85.68	99.31	122.57	132.20
Indicators	Web or table reference	Ministry or Statistical Office	Methodological sheet	Unit	2017	2018	2019	2020	2021	2022	2023	2024
Renewable resources												
Forest area	Forestry Facts & Figure of FRMD, MoAF	MoENR	Available	ha	2,730,889.00	2,730,889.00	2,730,889.00	2,730,889.00	2,717,161.64	2,717,161.64	2,717,161.64	2,717,161.64
Proportion of land area covered by forest [percentage]		MoENR	Available	%	71.00	71.00	71.00	71.24	71.02	70.13	70.57	70.35
Natural forest as % of total forest area		MoENR	May be available	%	99.25	99.22	99.22	99.99	99.99	99.99	99.99	99.99
Planted forest as % of total forest area		MoENR	May be available	ha	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Deforestation [Ha and % of forest area per year]		MoENR	May be available		0.01	0.07	0.07	n.a	n.a	n.a	n.a	n.a
Fish Produced, total [marine and freshwater] (KG)	NSB	MoAL, DoL/NSB	Available	Kgs	199,918.00	223,623.00	223,623.00	181,645.00	192,970.00	36,523.00	43,260.00	57,992.00
Non-renewable resources												
Mineral resources: stocks or reserves of selected minerals, including fossil fuels and critical raw materials, as determined by the reporting country	Types	DGM, MoENR	May be available									
Extraction rates of selected minerals, including fossil fuels and critical raw materials, as determined by the reporting country	Dolomite	Available	Dolomite	MT	2,546,255.51	2,821,166.00	3,027,517.70	1,232,106.76	9,627,045.97	2,767,394.66	2,937,929.79	2,760,377.24
	Limestone		Lime stone	MT	1,235,161.67	1,344,038.00	1,546,302.14	182,900.88	4,308,402.69	964,329.54	1,231,941.09	1,034,365.85
	Gypsum		Gypsum	MT	328,127.99	461,128.00	490,595.50	282,589.50	1,562,440.99	400,182.65	1,098,564.61	513,476.65
	Coal		Coal	MT	161,526.74	186,824.00	184,784.48	274.07	533,409.29	158,603.26	113,950.48	169,489.43
	Marble		Marble	MT	96,567.10	188,901.00	94,318.33	-	379,786.43	26,433.33	159,119.24	115,856.69
	Quartzite		Quartzite	MT	175,501.08	145,714.00	141,065.90	8,807.63	471,088.61	153,219.13	239,833.43	247,128.46
	Talc		Talc	MT	1,293.20	2,042.00	1,374.75	972.09	5,682.04	739.72	357.55	3,000.00
	Stone		Stone	MT	3,828,254.00	3,730,975.00	n.a	n.a	n.a	1,841,817.42	2,364,153.02	1,881,284.03
	Granite		Granite	MT	26,422.69	6,080.00	3,391.30	-	35,893.99	2,406.58	629.64	275.30
	Phyllite		Phyllite	MT	61,910.29	53,189.00	78,246.35	-	193,345.64	43,931.32	13,906.81	5,423.12
	Calc Tufa		Cal Tufa	MT	n.a	12,324.00	22,079.14	-	-	-	-	-
	Iron Ore		Iron Ore	MT	32,974.37	37,843.00	36,864.20	-	107,681.57	3,491.58	14,017.66	8,452.02
	Clay		Clay	MT	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Proportion of agricultural area to total land area					2.93	2.93	2.46	2.46	2.46	2.46	2.46	2.46
Area equipped for irrigation as % of agricultural area	RNR statistics	MoAL	Available	%	94.20	94.20	83.36	n.a	n.a	n.a	n.a	n.a
Arable land, % total land area		MoAL	Available	%	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93
Pasture and temporary meadows, % total land area		MoAL	Available		n.a	n.a	0.06	n.a	n.a	n.a	n.a	n.a
Land area affected by degradation, by type of degradation, as % of total land area		MoAL	Available	%	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Proportion of organic agricultural area in total agricultural area	RNR statistics	MoAL	May be available		n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Pesticides used on crop areas [kg / ha]		MoAL	Available	kg/hec	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Chemical fertilizers used, kilogram per hectare of crop land		MoAL	Available	kg/hec	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Natural fertilizer use, kilogram per hectare of cron land		MoAL	Available		n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a

Indicators	Web or table reference	Ministry or Statistical Office	Methodological sheet	Unit	2017	2018	2019	2020	2021	2022	2023	2024
Biodiversity and ecosystems												
Number of known flora and fauna species by status category		NBC, MoAL	Available	Nos	5603 Vascular plants	< 5,600 Vascular plants	< 5,600 Vascular plants	< 5,600 Vascular plants	n.a	< 5,600 Vascular plants	< 5,600 Vascular plants	< 5,600 Vascular plants
					400 Lichens	287 Lichens	280 lichens	280 lichens	n.a	287 lichens	287 lichens	287 lichens
					200 Mammals	200 Mammals	129 Mammals	200 Mammals	n.a	129 Mammals	129 Mammals	129 Mammals
					721 Birds appx	740 Birds appx	748 birds	747 birds	n.a	736 birds	736 birds	736 birds
Number of endemic flora and fauna species by class (mammals, reptiles, etc.)		MoAL/NBC	Available	Nos	144 endemic plants	145 endemic plants	145 endemic plants	145 endemic plants	n.a	n.a	n.a	n.a
					27 Globally Threatened mammal	27 Globally Threatened mammal	27 globally threatened mammal	27 globally threatened mammal	n.a	26 globally threatened mammal	26 globally threatened mammal	26 globally threatened mammal
					18-Critically endangered & vulnerable birds	47-Globally threatened birds	47-Globally threatened birds	31-Globally threatened birds	n.a	30-Globally threatened birds	30-Globally threatened birds	30-Globally threatened birds
% of threatened flora and fauna species by class (mammals, reptiles, etc.)		MoAL	Available	%								
Proportion of terrestrial protected areas to total surface area, %	MoAF		Available	%	51.44	51.44	51.44	43.48	43.48	43.48	43.48	43.48
Footprints												
Ecological footprint	GNHC	GNHC	Available	Hec/capita	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
The environmental dimension of quality of life												
Environmental health and risks												
Concentration of particulate matter (PM10) in urban air [main cities]	UNFCC Report	DECC	Available	Microgram/m ³	40.28	40.28	40.28	40.28	40.28	40.28	40.28	40.28
Environmental services and amenities												
Proportion of total population using an improved drinking water source	BLSS Report	NSB	Available	%	98.60	99.60	99.60	99.60	99.60	99.93	99.67	99.67
Proportion of urban population using an improved drinking water source		MoH	Available	%	99.60	99.60	99.60	99.60	99.60	99.93	99.97	99.97
Proportion of rural population using an improved drinking water source		MoH	Available	%	98.00	98.00	98.00	98.00	98.00	99.93	99.48	99.48
Proportion of total population using an improved sanitation facility		MoH	Available	%	74.80	74.80	74.80	74.80	74.80	99.10	99.30	99.30
Proportion of urban population using an improved sanitation facility		MoH	Available	%	84.72	84.72	84.72	84.72	84.72	99.80	99.60	99.60
Proportion of rural population using an improved sanitation facility		MoH	Available	%	69.00	69.00	69.00	69.00	69.00	98.70	99.10	99.10
Municipal waste collected [total]		MoENR	Available	Tons	30,966.60	38,076.80	62,838.40	62,838.40	62,838.40	62,838.40	62,838.40	62,838.40
Municipal waste collected [per capita]		MoENR	Available	Tons per capita per day	0.11	0.14	0.22	0.22	0.22	0.22	0.21	0.21
Policy responses and economic opportunities												
Regulations and management												
Annual government environment protection expenditure [as % of government expenditure and/ or as % of GDP]	Public Expenditure Review Report	DPA, MoF	Available	%	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Participation in multilateral environmental agreements [list and number of MEAs]		DECC	May be available	Nos	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Number of regulated pollutants by media [water, air, soil, etc]	Environmental Standards - 2010 (NEC)	DECC	Available	Water = 5	Water = 5	Water = 5	Water = 5	Water = 5	Water = 5	Water = 5	Water = 5	Water = 5
				Industrial effluent = 32	Industrial effluent = 32	Industrial effluent = 32	Industrial effluent = 32	Industrial effluent = 32		-	-	-
				Sewerage effluent = 3	Sewerage effluent = 3	Sewerage effluent = 3	Sewerage effluent = 3	Sewerage effluent = 3	Sewerage effluent = 3	Sewerage effluent = 3	Sewerage effluent = 3	Sewerage effluent = 3
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				Workplace emission = 5	Workplace emission = 5	Workplace emission = 5	Workplace emission = 5	Workplace emission = 5	Workplace emission = 5	Workplace emission = 5	Workplace emission = 5	Workplace emission = 5
				Vehicle emission = 2	Vehicle emission = 2	Vehicle emission = 2	Vehicle emission = 2	Vehicle emission = 2	Vehicle emission = 2	Vehicle emission = 2	Vehicle emission = 2	Vehicle emission = 2
				Noise level = 3	Noise level = 3	Noise level = 3	Noise level = 3	Noise level = 3	Noise level = 3	Noise level = 3	Noise level = 3	Noise level = 3
Green taxes (number and/or annual revenue)		AFS, MoF	Available	Mil Nu	909.65	938.56	1,025.52	812.46	593.79	992.86	906.781	813.976
International financial flows												
Official Development Assistance, total	AFS	DPA, MoF	Available	Mil Nu	12,986.75	14,847.07	10,516.48	16,425.75	14,882.29	13,583.51	14,363.32	10,615.57

* Used Projected emission value from 2020 to 2024

Chapter 3: Electricity Account

3.1 Overview

In Bhutan, the electricity sector is one of the key drivers of economic growth, contributing 11.78 percent to GDP in 2024. Hydropower is the primary energy resource in the country. Despite heavy reliance on hydroelectricity, Bhutan imports a significant amount of fossil fuels, particularly for the transport sector. The dependence on fossil fuels is expected to persist until electric vehicles become more affordable.

3.2 Hydroelectricity: Supply & Consumption

The total supply of electricity increased to 13,131.77 GWh in 2024 from 11,157.60 GWh in 2023, representing a significant increase of 17.69 percent. Of the total electricity supply, 88.90 percent was generated domestically, while imports accounted for 11.10 percent. In monetary terms, the value of the electricity supply increased from Nu. 28,614.10 million in 2023 to Nu. 36,535.74 million in 2024, an increase of 27.68 percent.

Industrial consumption of electricity increased by 28.29 percent, while household consumption increased by 27.98 percent. On average, industrial consumption accounted for 93.84 percent of total domestic consumption, while household consumption accounted for the remaining 6.15 percent.

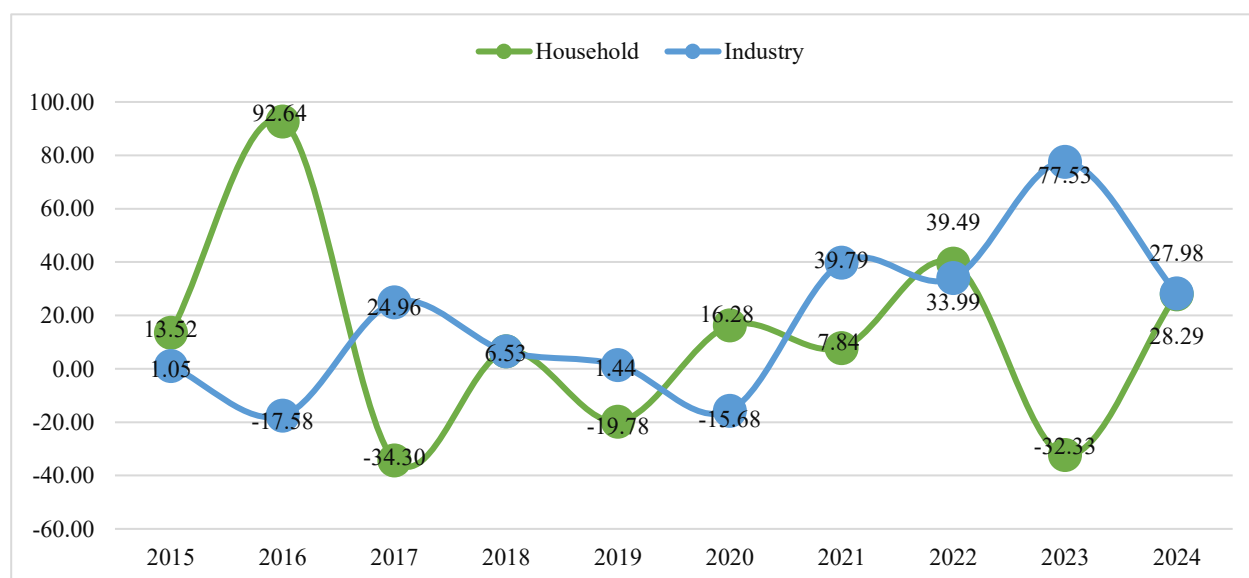


Figure 3.1: Consumption growth of electricity

Among the economic sectors, the manufacturing sector recorded the highest electricity consumption at 77.01 percent, followed by community, social, and personal services at 8.58 percent; transport, storage & communication at 4.30 percent; mining and quarrying at 3.14 percent; and construction at 2.80 percent.

Of the total electricity supply, 41.65 percent was exported, 57.75 percent was consumed domestically, and approximately 0.60 percent was attributed to transmission losses. Overall, domestic electricity consumption increased by 28.62 percent in 2024 compared to 2023.

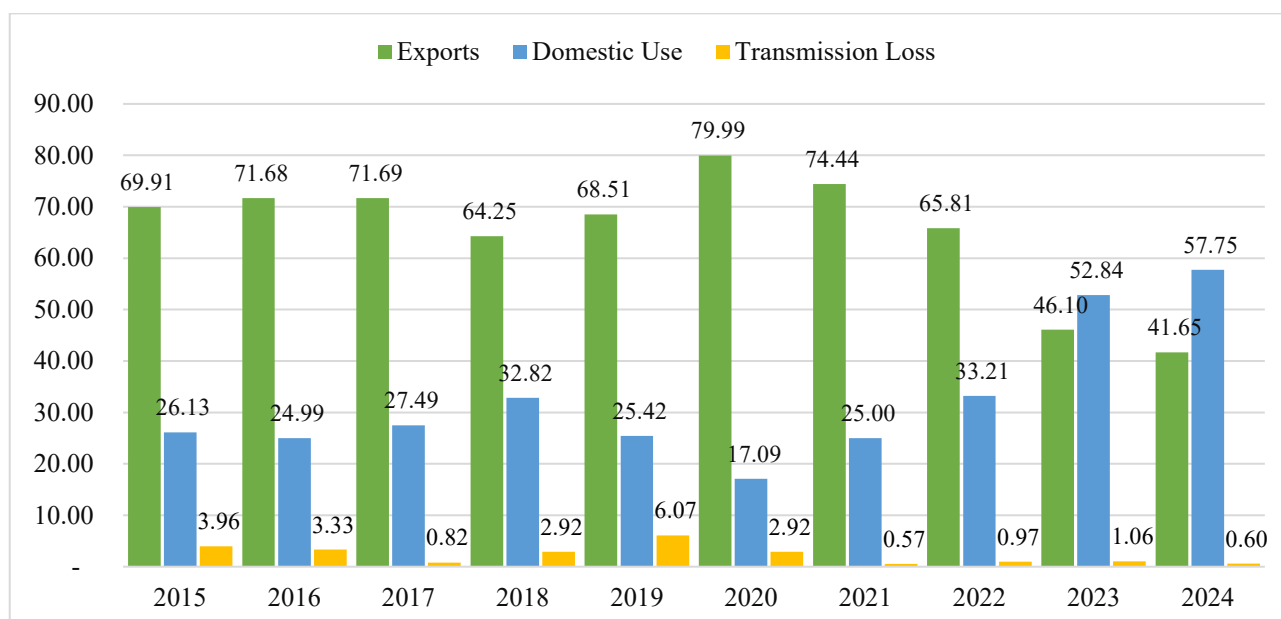


Figure 3.2 Share of Export, Domestic Use, and Transmission Loss

3.3 Electricity Trade

Overall, electricity production in the country increased by 10.80 percent in 2024 compared to 2023. Although Bhutan remains a net exporter of electricity, the country imports electricity during the lean season. In 2024, electricity exports increased by 6.34 percent, while imports surged by 134.43 percent.

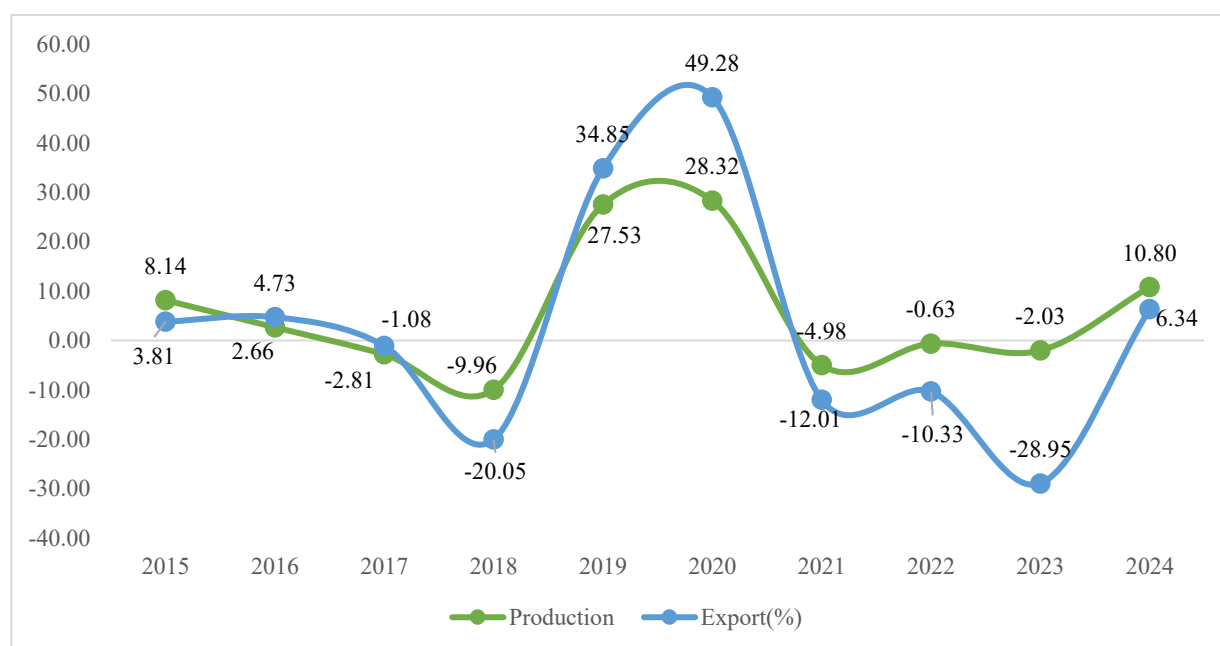


Figure 3.3 Growth in production and export (in %)

Chapter 4: Fuel Account

4.1 Fossil Fuel: Supply & Consumption of Diesel & Petrol

Due to the absence of natural petroleum and gas reserves, Bhutan relies entirely on imports from India to meet its domestic demand for fossil fuels such as diesel, petrol, and LPG. In 2024, Bhutan imported 264,271.64 KL of oil, the majority of which was used as fuel for automobiles. Petrol imports increased by 28.40 percent, and diesel by 24.80 percent during the year. Figure 4.1 illustrates the volume and growth trends of diesel and petrol imports for the period from 2015 to 2024.

In terms of volume, the total supply of petrol increased from 55,806.92 KL to 71,657.05 KL, and the supply of diesel from 154,340.28 KL to 192,614.59 KL in the year 2024.

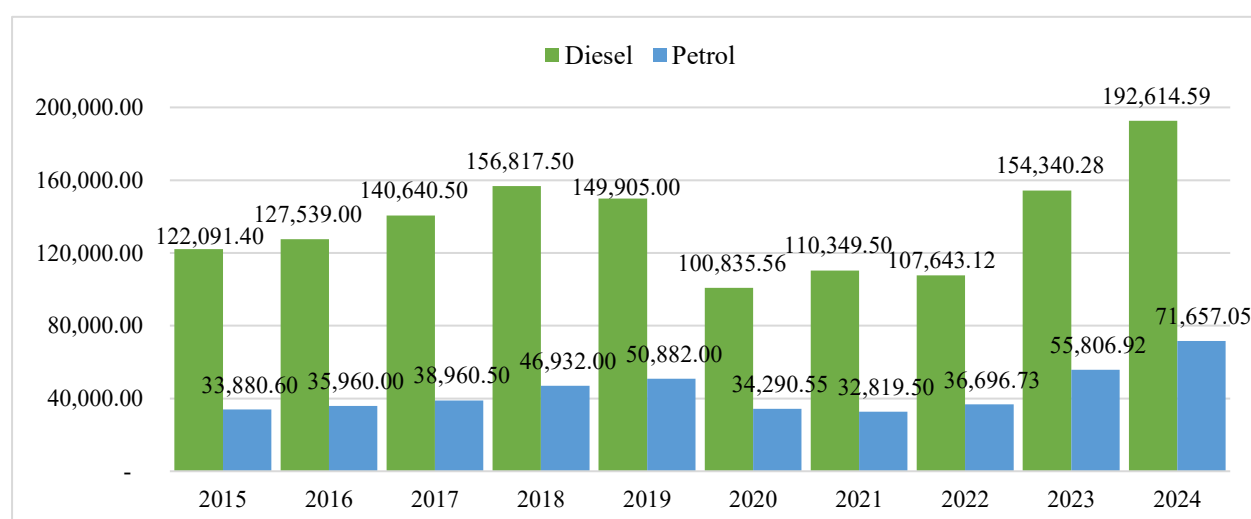


Figure 4.1: Fuel Imports and Growth Trends

In terms of consumption, the service sector accounted for the largest share of fuel use at 37.29 percent, followed by the household sector at 23.47 percent, the industrial sector at 15.94 percent, and the agriculture, livestock, and forestry sector at 10.05 percent. Detailed data are presented in Appendix Table 8 (Supply and Use Table for Fuel).

4.2 Re-export of Fossil Fuel

The term, re-export represents the portion of petrol and diesel imports attributed to consumption by Indian vehicles operating in Bhutan. This includes vehicles transporting goods to and from Bhutan, Indian tourist vehicles, and those refueling in border towns such as Samdrup Jongkhar, Gelephu, Phuentsholing, Gomtu, and Samtse.

In 2024, the re-export of fuel increased by 26.27 percent, rising from 27,716.55 KL in 2023 to 34,997.11 KL. Specifically, petrol re-exports grew by 28.40 percent, increasing from 11,302.05 KL in 2023 to 14,512.03 KL in 2024. Meanwhile, diesel re-exports rose by 24.80 percent, from 16,414.50 KL to 20,485.07 KL.

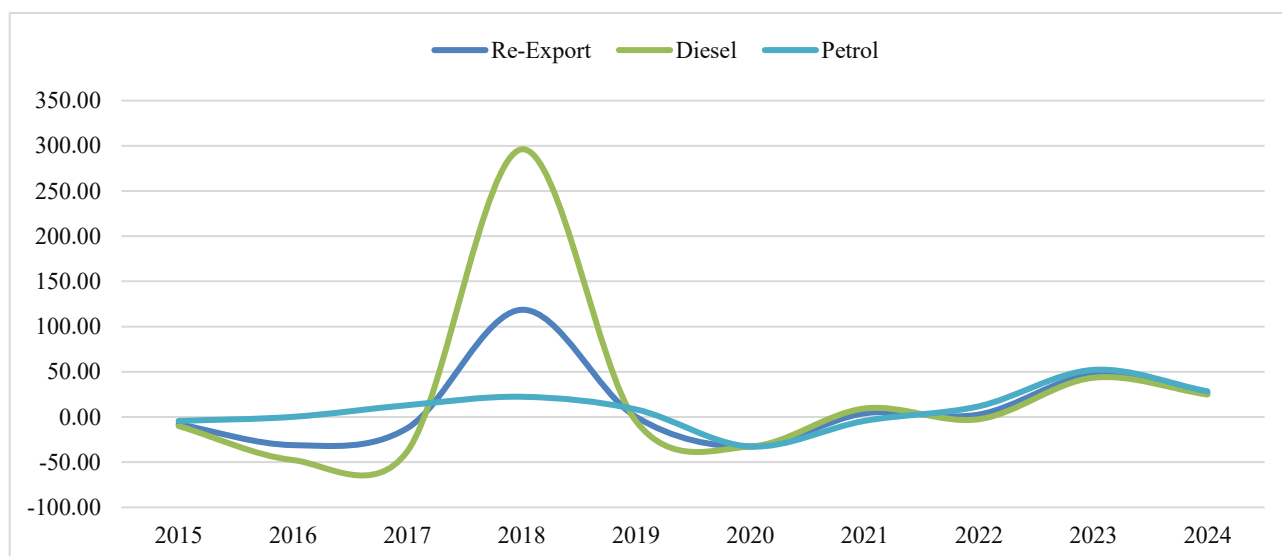


Figure 4.2: The growth of re-export of fuel

4.3. Kerosene: Supply & Consumption

The import of kerosene decreased significantly from 601.54 KL in 2023 to 252.01 KL in 2024, representing a decline of 58.11 percent. Kerosene is primarily used by households for heating and cooking. In 2024, all imported kerosene was utilized by households.

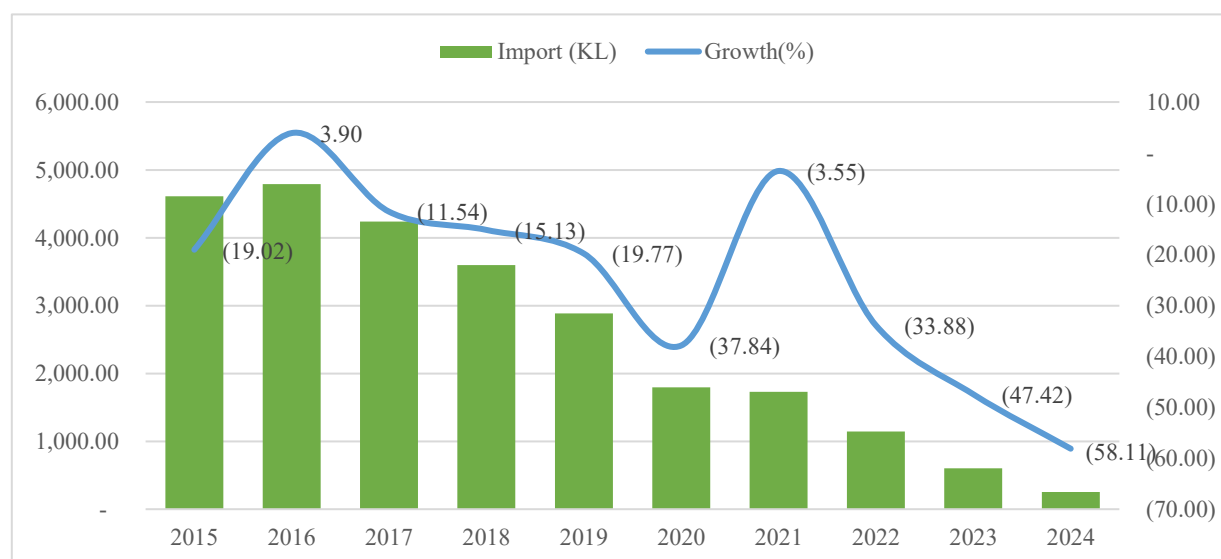


Figure 4.3: Import of kerosene and growth trend

4.4. LPG: Supply & Consumption

In Bhutan, LPG is primarily used by households for cooking. The import of LPG from India saw a significant growth until 2019, and beginning in 2020, LPG imports began to decline until last year. However, in 2024, imports increased to 8,978.20 MT, reflecting a growth of 9.58 percent compared to 2023.

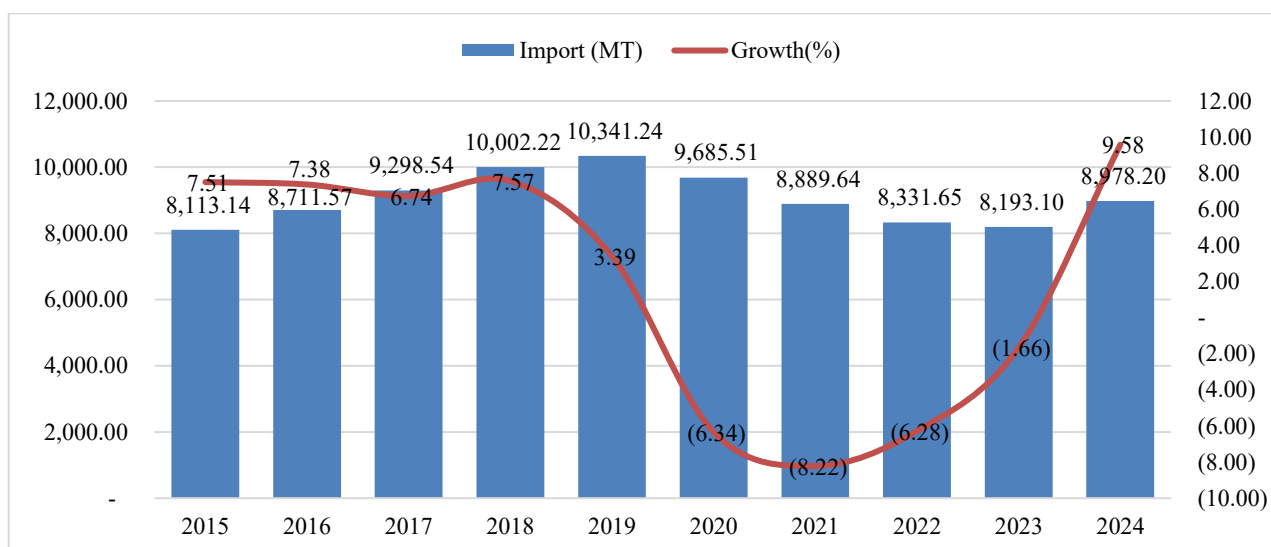


Figure 4.4: LPG Import and Growth (%) trend

4.5. Fuelwood: Supply & Consumption

Fuelwood is a common energy source for rural households in Bhutan. The NRDCL supplies fuelwood to urban households, while the DoFPS under the Ministry of Energy & Natural Resources (MoENR) issues permits to rural households to collect fuelwood. This report includes only the fuelwood supplied by NRDCL and DoFPS based on the permits issued and does not account for fuelwood collected by households without a permit.

In 2024, a total of 132,202.34 cubic meters of fuelwood were supplied. Of this total, the NRDCL supplied 36,330.76 cubic meters, constituting 27.48 percent, primarily to urban households and institutions. The remaining 95,871.58 cubic meters (72.52 percent) were supplied by the DoFPS, mainly to rural households.

Fuelwood consumption is broadly categorized into household by urban, rural, and industrial use based on the distribution records from NRDCL and DoFPS. In 2024, household consumption accounted for 54.08 percent, while industries consumed approximately 45.92 percent.

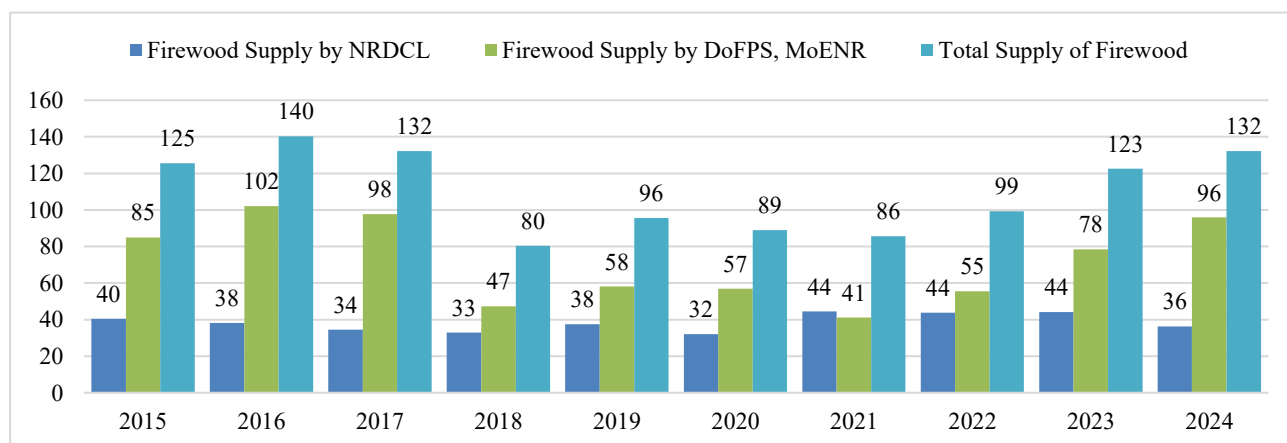


Figure 4.5 Fuelwood Supply (000' m3)

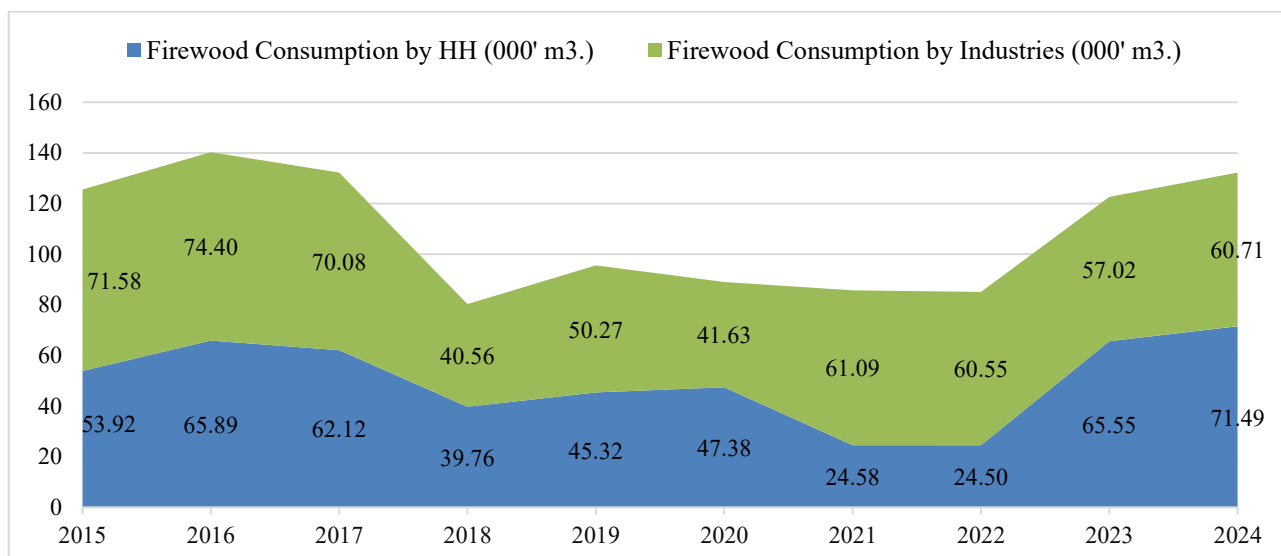


Figure 4.6: Consumption of firewood by HH & Industries (in 000' m3)

Chapter 5: Asset Account

5.1 Introduction

In general, assets are defined as items considered valuable in the economy. In economics, assets are viewed as stores of value that often serve as inputs to production processes. Asset accounts for minerals and natural resources, such as timber, sand, stone aggregates, and stone chips, are tracked through supplies and disposals by NRDCL and the DoFPS. The data is organized by the levels and values of stocks of natural inputs and how these stocks change over time.

The System of Environmental-Economic Accounting (SEEA) Central Framework emphasizes that flows related to extraction, depletion, and discoveries are central to asset accounts. This information is crucial for understanding the sustainability of individual resources.

5.2 Timber: Supply & Consumption

Timber is used particularly for construction purposes, renovation of Dzongs & Lhakhangs, and other constructions. The agencies responsible for managing the timber supply are NRDCL and the DoFPS. It is either supplied for commercial use or on a concessional basis to the rural households, depending on its use.

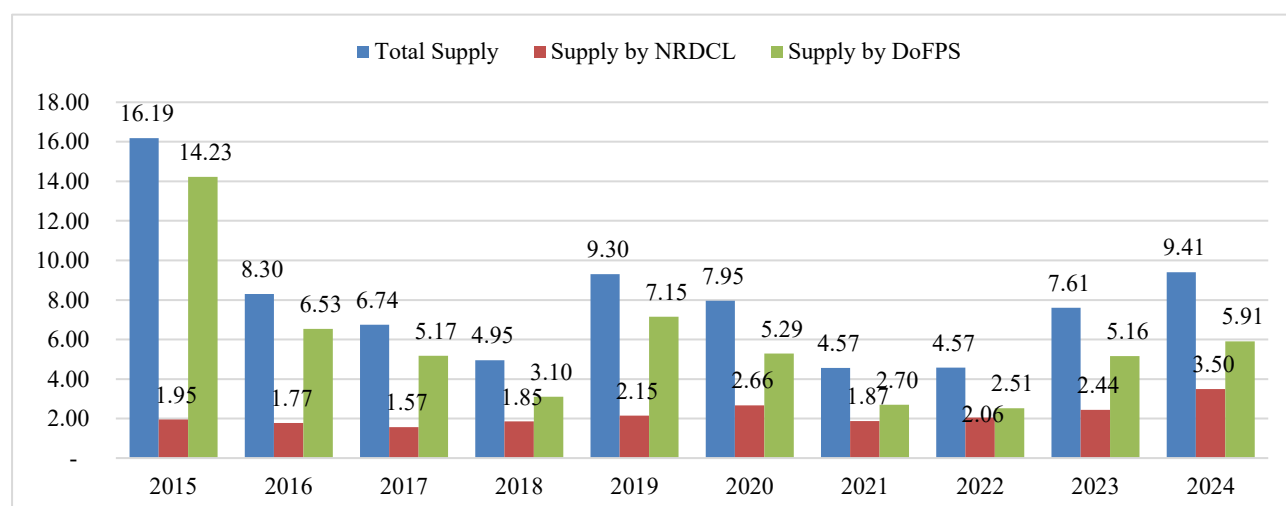


Figure 5.1: Supply of Timber (in Mil. Cft)

Timber supply in the economy increased significantly in 2024 compared to 2023. A total of 9.41 million cubic feet of timber was supplied in 2024, representing a 23.67 percent increase. Of this total supply, 62.80 percent was provided by the DoFPS, while 37.20 percent was supplied by NRDCL.

Timber consumption was broadly categorized into commercial and concessional use, with 6.99 million cubic feet used for commercial purposes and 2.31 million cubic feet for concessional purposes. However, sector-wise consumption data for timber were unavailable and thus could not be estimated.

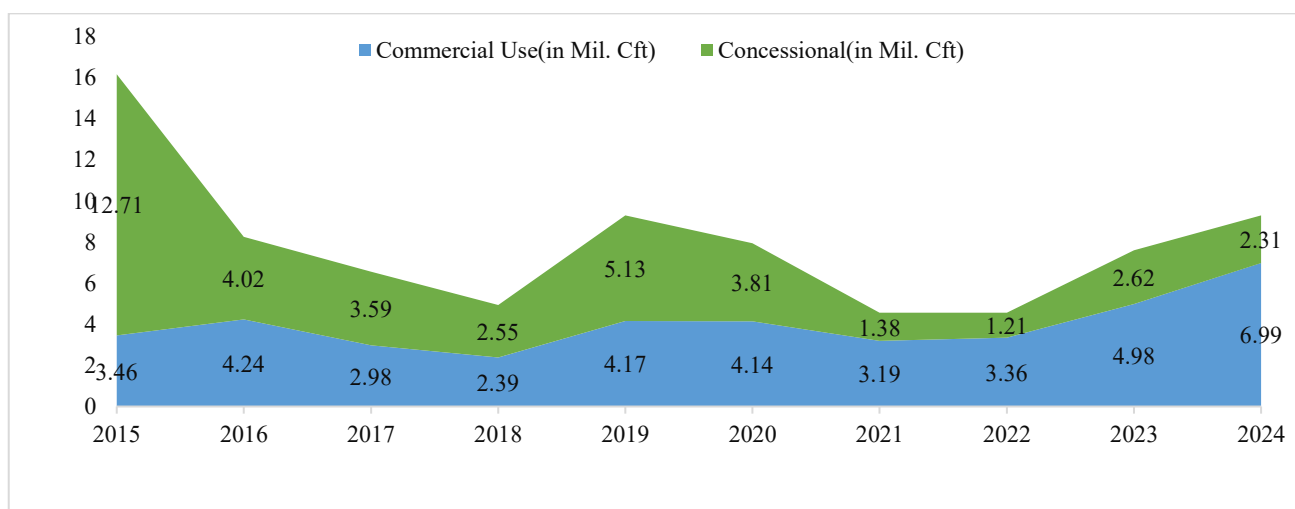


Figure 5.2: Use of Timber (in Million Cu ft.)

5.3 Sand: Supply and Consumption

NRDCL is the primary agency responsible for supplying sand for public consumption. However, the DoFPS also issues permit for individual sand extraction. Therefore, the total sand supply includes both NRDCL's supply and the extraction permitted by DoFPS.

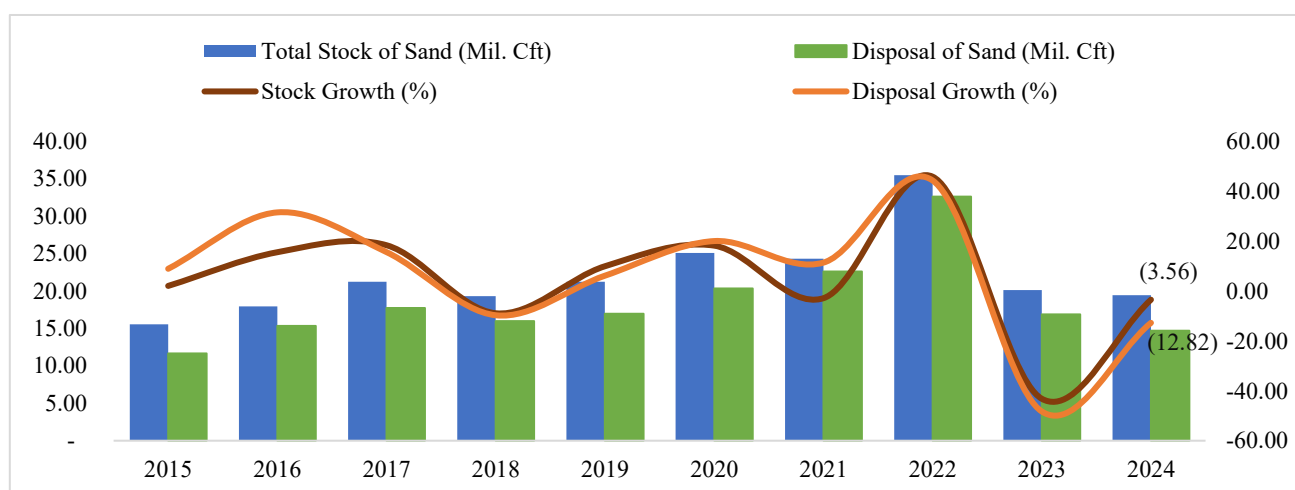


Figure 5.3: Stock, Disposal, and Growth Trends of Sand

The total stock of sand decreased by 3.56 percent in 2024 compared to 2023. Additionally, the disposal of sand also dropped by 12.82 percent, as reflected in Figure 5.3.

5.4 Mineral Asset Account

This publication focuses primarily on non-metallic mineral resources, as information on metallic mineral resources in Bhutan is not available. The mineral asset accounting for non-metallic minerals is based solely on the available primary data from the Department of Geology and Mines (DGM). These mineral resources are extracted for economic use and are generally considered non-renewable. Hence, it is crucial to understand the quantity of mineral deposits by type and their rate of extraction.

Mineral resources in Bhutan are geologically known deposits that are extracted by mining and quarrying companies. The country's non-metallic resources include quarry materials such as coal, dolomite, limestone, gypsum, quartzite, and talc.

The key factors in the measurement of mineral asset accounting include understanding the mineral resources in the form of deposits or reserves and its extractions by different mining and quarrying companies. The deposit influences the likelihood and the cost of current and future extraction.

Physical asset accounts for mineral resources were compiled by type of mineral resources, and it include estimates of the opening and closing stocks of each mineral resource and changes in the stock over the accounting period. The NSB considered reserves of minerals which are geologically known reserves, and its level as the opening stock, while the extractions were recorded as depletion.

5.5 Mineral Reserves

Data on reserves are gathered to use in developing physical accounts so as to understand the opening stock of individual mineral resources. There are three categories of mineral resources: proved, probable, and possible. *Proved are economically mineable with a high degree of certainty (high confidence level). Probable are economically mineable with a lower level of confidence than proved reserves. Possible minerals are part of a mineral resource for which grade and mineral content are estimated with a low level of confidence.*

5.6 Extraction of Minerals

Minerals are extracted by mining and quarrying companies at different locations in the country. Information on the extraction of minerals was compiled to ascertain whether mineral extractions or harvests are carried out sustainably.

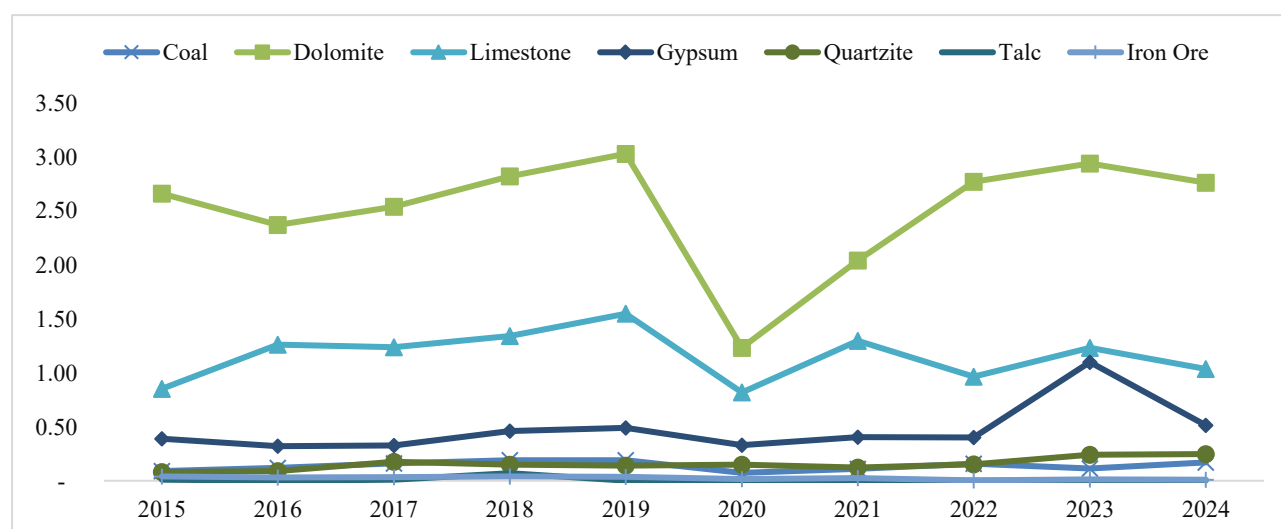


Figure 5.4 Trend in mineral extraction in million MT

The average coal extraction from 2015 to 2024 was estimated at 0.14 million MT, and the extraction ranged from 0.07 million MT to 0.19 million MT. The coal extraction in 2018 and 2019 was highest at 0.19 million

MT followed by 0.17 million MT in 2024, and the extraction was a minimum at 0.07 million MT in the year 2020. Extraction of dolomite, on the other hand, was recorded on average from 2015 to 2024 at 2.52 million MT, with the highest extraction of 3.03 million MT in 2019.

From 2015 to 2024, the extraction of limestone and gypsum has remained relatively stable, averaging 1.16 million MT and 0.47 million MT per year, respectively. Talc extraction remained the same at 0.0007 million MT in both 2021 and 2022. In 2023, it registered a slight decline to 0.0004 million MT, followed by a significant increase to 0.0030 million MT in 2024. The only metal accounted for in this report is iron ore, with an average extraction of 0.02 million MT yearly from 2015 to 2024. The detailed trends are shown in *Figure 5.4*.

5.7 Physical Asset Account for Minerals

Physical asset account for minerals was compiled by type of minerals and includes estimates of the opening and closing stock of each mineral and the changes over a period of time. The changes in stock encompass types of changes such as discoveries, reappraisals (including both downward and upward), extractions, catastrophic losses, and reclassifications. The total reserve of a particular mineral resource was considered as the opening stock; additions to the stock, such as discoveries, upward reappraisals, and reclassifications, are added to the total reserve. Extractions by different mining and quarrying companies are accounted for and thus subtracted from the total known reserves to ascertain the outstanding reserves of individual mineral resources. Here, the outstanding reserves do not necessarily mean reserves remaining from the known reserve; they may also include unknown reserves in the ground.

The physical asset account for different minerals records the opening stock: the level of mineral resources at the beginning of the year; increases in stocks through discoveries and other increases; decreases in stock through extractions and other decreases; and the closing stock at the end of the accounting year. Thus, by the end of the accounting year 2024, closing stocks are estimated at 14,509.75 million MT Dolomite; 148.91 million MT limestone; 127.72 million MT gypsum; 3.16 million MT Quartzite; and 2.40 million MT Iron-ore. Whereas, for coal and talc are estimated as null, which means extraction of coal and talc has exceeded the known reserves from 2018 onwards. Since these two minerals fall under the possible mineral category, it is difficult to estimate the exact quantity of remaining reserves.

5.8 Monetary Asset Account for Minerals

The monetary asset account for mineral resources shows the market-based valuation of individual mineral resources and changes in the value of these stocks over time. The Net Present Value (NPV) for the constant extraction profile approach is adopted to compute the monetary value of mineral resources. The formula for the calculation of NPV using an appropriate discount rate is:

$$V_t = \sum_{r=1}^N \frac{RR_{(t+r)}}{(1 + r_t)^t}$$

Where V_t is the value of the asset at time t ; N is the asset life (number of periods in which extraction takes place); RR_t is the resource rent at period t as expected at the beginning of period t ; and r is a nominal discount rate.

In this calculation, the NSB derived the harvest or actual quantity of extraction of individual minerals on the total volume of mineral resource left for future extraction, divided by the number of years (i.e., lease period provided to mining and quarrying companies). The resource rent for each mineral resource is calculated using the company's books of accounts. The NPV of future extraction is discounted back to the current value term using the appropriate discount rate.

In most countries around the world, the lending or interest rate is used as the basis to estimate the discount factor in the absence of any appropriate discount rate. We used the Bank of Bhutan's fixed lending rate of 12 % to Mining & Quarrying Companies as the discount rate for this particular computation.

For the accounting year 2024, Dolomite's net present value (NPV) was estimated at Nu. 161,457.80 million, provided a constant average extraction of 967.88 million MT, assumed to maintain the same for future years, with a constant per unit future resource rent of Nu. 293.99 million. Under similar conditions, we estimated NPV for other mineral resources such as coal, limestone, gypsum, quartzite, talc, and iron ore. Limestone was estimated at Nu. 36,241.45 million, provided constant average extraction of 10.14 million MT and per unit future resource rent of Nu. 5,019.86 million; Gypsum was estimated at Nu. 5,007.86 million, given a constant average extraction of 8.65 million MT and per unit resource rent of Nu. 813.46 million; Quartzite was estimated at Nu. 580.62 million, with a constant average extraction of 0.25 million MT and a per unit resource rent of Nu. 3,220.0 million; Iron ore at Nu. 54.01 million, provided a constant estimated average extraction of 0.16 million MT and a per unit future resource rent of Nu. 468.50 million. The detailed calculation tables are attached at the end in a list of statistical tables, particularly *Tables 29-35*.

Chapter 6: Experimental Energy Account

6.1 Overview

The experimental energy accounts presented in this publication are in accordance with the principles of the System of Environmental-Economic Accounting (SEEA). It records flows of energy in physical units from the initial extraction or capture of energy resources from the environment into the economy; the flows of energy within the economy in the form of the supply and use of energy by industries and households; and the flow back to the environment.

SEEA-2012 recommends developing energy flow accounts to help clarify the relationship between the energy sector and some components of the environment, focusing on the role of energy-related air emissions. The data presented are necessary for the derivation of important indicators such as energy intensity, efficiency, productivity, etc., which ultimately relate to sustainable development indicators such as air quality and climate change indicators.

The physical supply and use (PSUT) approach accounts for energy flows by recording natural inputs, energy products, energy residuals, and other residual flows in physical units of measure. It is based on the principle that the total supply of each flow is equal to the total use of the same flow (i.e., the total supply of energy products equals the total use of energy products)

Besides hydro-electricity being the main source of energy, Bhutan also imports energy products like coal and fossil fuels from India to cater to the energy needs of economic sectors, particularly the industry and transport sectors. The experimental energy accounts were compiled purely based on the latest available information from Bhutan Trade Statistics (BTS) of the Ministry of Finance and data from other administrative sources. It adopts the *Standard International Energy Product Classification* (SIEC) and uses the *Intergovernmental Panel on Climate Change (IPCC)* Conversion Factor (CF). The CF used is as follows:

Fuel	Basic Unit	Terajoules	Tonnes of Oil Equivalent (ToE)	Petajoules
ATF (Jet Kerosene)	kl	0.03561	0.8505	0.000036
Coal (Anthracite)	MT	0.02670	0.6377	0.000027
Coal (Sub-bituminous)	MT	0.01890	0.4514	0.000019
Other Coal (Lignite)	MT	0.01190	0.2842	0.000012
Coke of Coal	MT	0.02820	0.6735	0.000028
Diesel (Gas Diesel Oil)	kl	0.03741	0.8935	0.000037
Electricity	GWh	3.60000	85.9845	0.003600
Wood (fuelwood and Briquette)	MT	0.01560	0.3726	0.000016
Kerosene	kl	0.03590	0.8578	0.000036
LPG	MT	0.04730	1.1297	0.000047
Petrol (Motor Gasoline)	kl	0.03411	0.8147	0.000034
Biogas	MT	0.05040	1.2038	0.000050
Light Diesel Oil (LDO)	kl	0.03655	0.8730	0.000037

Units	Abbreviation	Terajoules	Petajoules
Tonnes of Oil Equivalent	ToE	0.041868	0.000041868
Terajoules	TJ	1	0.001
Megawatt Hour	MWh	0.0036	0.0000036
Kilowatt Hour	kWh	0.0000036	3.6E- 09
Kilocalorie	K kcal	4.19E- 09	4.19E- 12
Joule	J	1E- 12	1E- 15
Gigawatt Hour	GWh	3.6	0.0036

6.2 Energy Consumption

Energy consumption measures the amount of energy used in the Bhutanese economy. It is equal to indigenous production plus imports minus exports and changes in stocks. It includes energy consumed in energy conversion activities (such as electricity generation). It can be referred to as total net energy consumption and is also equal to total primary energy supply. The total energy consumption increased from 834.53 KToE in 2023 to 1,026.93 KToE in 2024, representing a 23.05% rise.

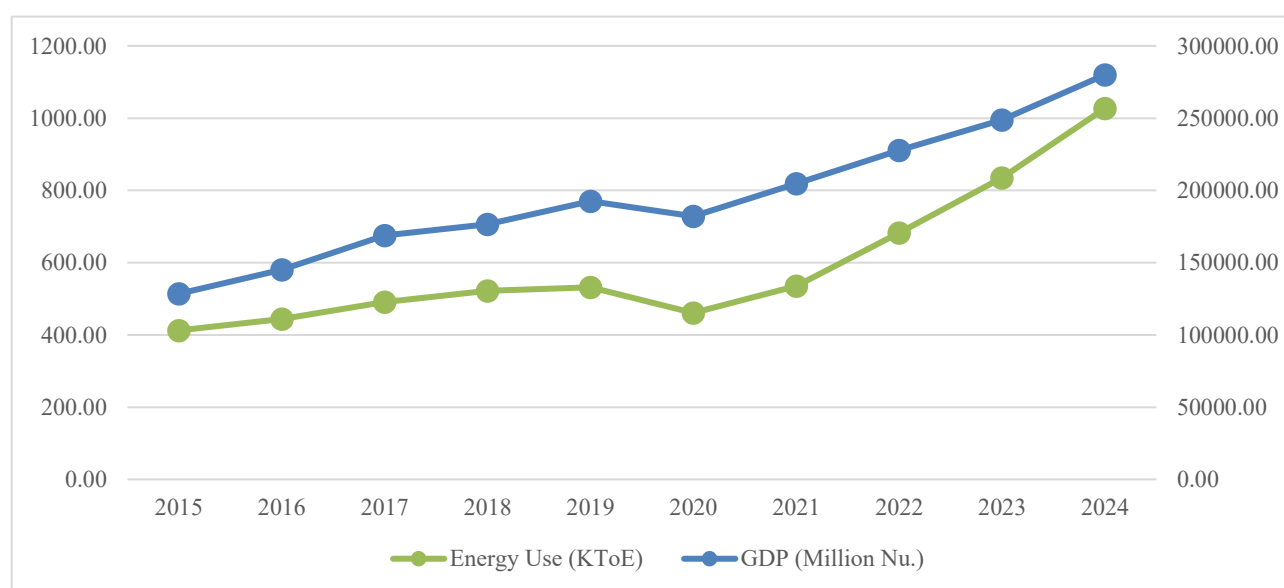


Figure 6.1: Yearly Domestic Energy Consumption and the GDP

Renewable (Electricity, wind, wood) accounts for the largest share of energy consumption in the economy at around 65.73 percent, where it consists mainly of hydro energy. The Oil (Diesel, Petrol, kerosene, and Aviation turbine fuel (ATF)) sector remained the second largest, accounting for about 22.89 percent of energy consumption. Coal energy consumed around 10.39 percent, whereas gas energy consumption was at around 0.99 percent.

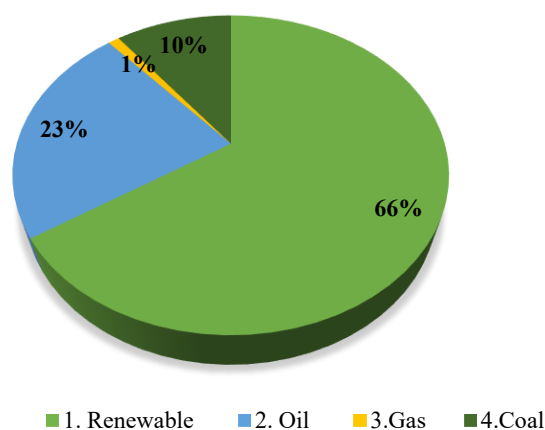


Figure 6.2: Energy Consumption by fuel type in KToE and share (%)

In 2024, the consumption of Liquefied Petroleum Gas (LPG) increased by 9.58 percent. The consumption of coal has increased by 7.10 percent, whereas the consumption of Renewable energy increased 25.15 percent, and oil energy has increased by 26.21 percent.

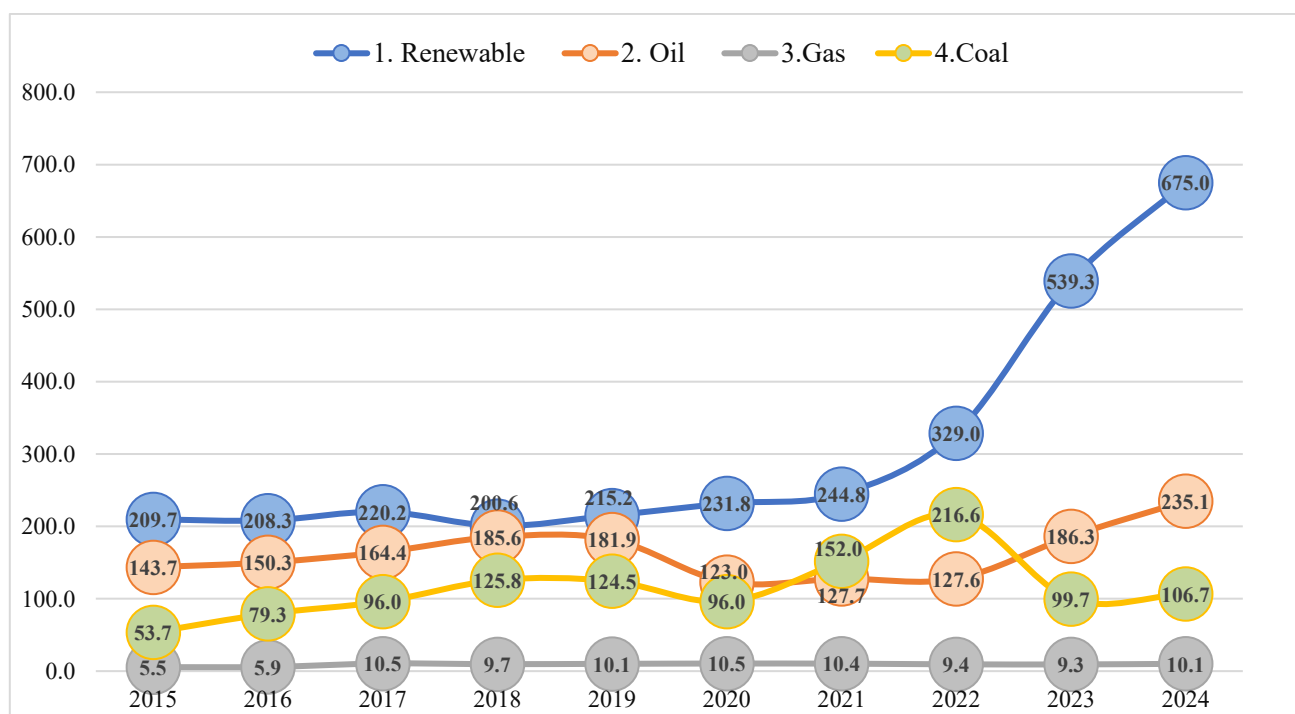


Figure 6.3: Yearly Energy Consumption (in KToE) trend by fuel type

6.3 Energy Production

Energy production is defined as the total amount of primary energy produced in the economy, measured before consumption and transformation. Domestic production of primary energy increased by almost 12.22 percent in 2024 compared to 2023; thus, the total energy production reached 1,139.01 KToE. Production continued to become increasingly export-oriented. Bhutan is a net exporter of energy, including hydroelectricity and coal, with net exports more than one-third of the total production.

Domestic energy production in Bhutan primarily includes renewable energy (mainly hydroelectricity) and coal. In 2024, production of both renewable energy and coal increased by 9.22 percent and 48.73 percent, respectively, compared to the previous year.

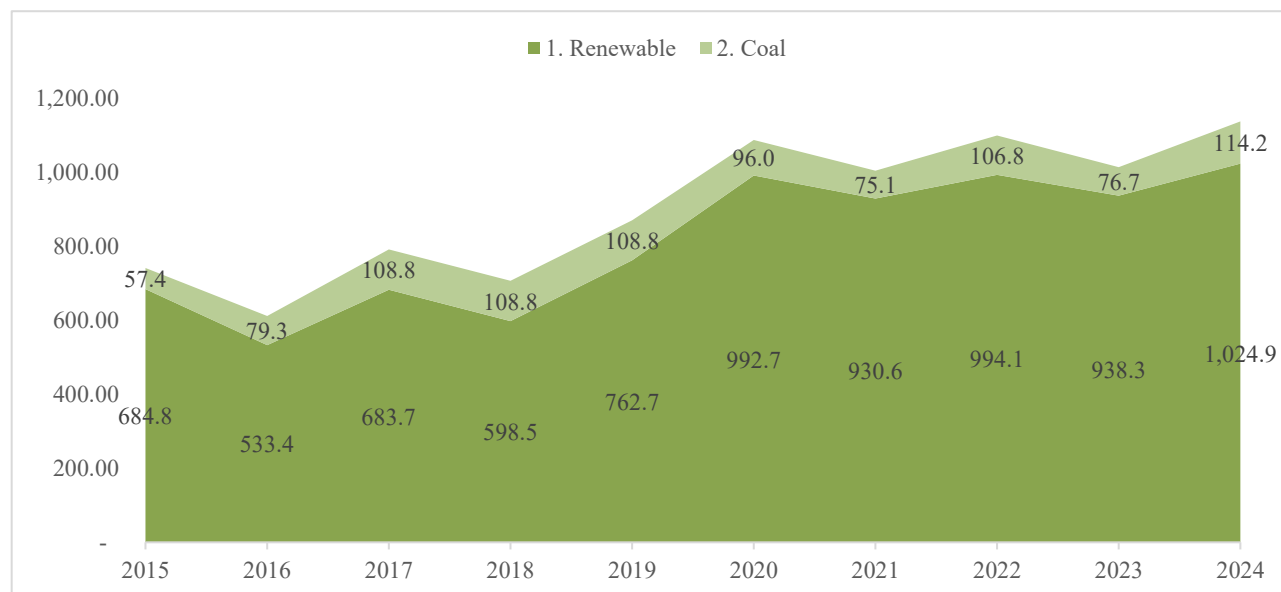


Figure 6.4: Yearly Energy Production by fuel type (KToE)

6.4 Energy Trade

6.4.1 Energy import from RoW

Bhutan imports various energy products, such as fossil fuels (diesel & petrol), aviation turbine fuel, kerosene, furnace oil, LPG, coal, and hydroelectricity. Fossil fuel (diesel & petrol) imports account for about 51.30 percent of the total energy import, which is mainly used by the transport sector. Renewable energy remained the second highest, with about 27.35 percent of total energy imports. The share of gas, coal, and aviation turbines was less.

The country's overall energy imports rose by 37.70 percent from 2023 to 2024. Imports of renewable, coal, and oil energy recorded substantial increases, while gas energy imports rose by 2.21 percent in 2024, slightly lower than the 2.78 percent growth in the previous year.

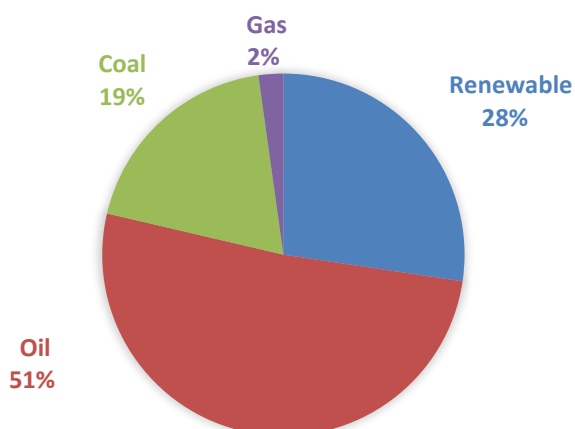


Figure 6.5 Share of energy Import (in KToE)

6.4.2 Energy Export

In terms of energy, Bhutan's exports are dominated by hydroelectricity, which accounts for nearly 94 percent of total energy exports. However, as shown in the *Figure 6.6*, we also observe a very negligible share of petrol and diesel export which is defined as a fuel re-export, that generally includes some portion of the imported fuel consumed by Indian vehicles plying on Bhutanese roads transporting goods in and out of the country, fuel consumed by Indian tourist vehicles and refueling by Indian vehicles in the border towns.

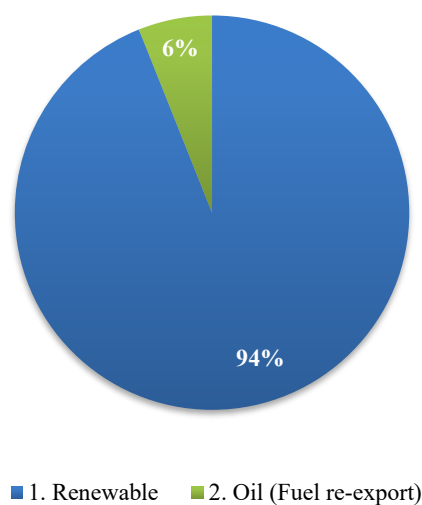


Figure 6.6: Share of energy Export (in KToE)

Chapter 7: Concepts, Definitions & Terminologies of SEEA

7.1 Green Economy

UNEP 2011 defines a green economy as one that results in “improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities”. The Green Economy Indicators are compiled based on the framework of the United Nations Statistics Division (UNSD), which closely follows the OECD green growth structure. It consists of 44 core sets of indicators (CS) and 53 indicators that are non-core (NCS).

7.2 SEEA

The System of Environmental-Economic Accounting (SEEA) is an international statistical standard that provides a comprehensive set of accounting tables to guide national statistics offices for the compilation of consistent and comparable statistics and indicators for policymaking, analysis, and research. It provides a conceptual framework for understanding the interactions between the environment and the economy.

7.3 Electricity Account

The total supply, as explained above, is accounted as:

$$S = DP + M;$$

where, S =Total Supply, DP =Domestic Production, and M =Import.

Information on the production side (supply) is sourced from the annual reports of DGPC.

The total use is computed as:

$$U = DU + X;$$

where U =Total Use, DU =Domestic Use (input in industries & household consumption), X =Export.

The consumption data are sourced from BPCL and accordingly mapped into different sectors of the economy.

7.4 SNA

The System of National Accounts is the framework of accounts which measures the level of economic development and the rate at which the economy of the country grows over time.

7.5 Depletion

SEEA defines depletion as the decrease in the quantity of the stock of a natural resource over an accounting period due to the extraction of the natural resource by economic units.

7.6 Opening stock of minerals

The opening stock is the level of mineral resources at the beginning of the year, and it should be equal to the closing stock of the previous year.

7.7 Closing stock of minerals

The closing stock of minerals is the level of reserve at the end of the year, and it should be equal to the opening stock of the subsequent year.

7.1 Upward changes

Upward changes are any new discoveries of new stocks of minerals through exploration and evolution.

7.2 Downward changes

Downward changes are changes through extractions or any other decreases, like catastrophic losses and reclassifications.

7.1 Resource Rent

The resource rent is the economic value of the mineral, and it is estimated to ascertain whether mineral resources are being harvested sustainably. It is calculated based on the residual value method of SEEA, which excludes operating costs, specific taxes and subsidies, and consumption of fixed capital from the output.

7.2 Social discount rate

The Net present value (NPV) method uses social discount rates to discount the value of future returns to explain in current terms. The returns earned in the current period are worth more than the returns earned in the future.

7.3 Energy accounts

Energy accounts provide information on energy supply and use. It applies the principle that the supply of energy equals the use of energy. It presents information on energy production, domestic consumption, and net export.

7.4 Energy from natural inputs

Energy from natural inputs encompasses flows of energy from the removal and capture of energy from the environment by resident economic units.

7.5 Energy products

Energy products are products that are used as a source of energy. They comprise fuels that are produced/generated by economic units as a source of energy; electricity generated by economic units; and heat sold or generated by other economic units.

7.6 Energy residuals

Energy residuals are mainly energy losses through flaring and venting of natural gas and losses during transformation in the production processes, leakages of liquid fuels, loss of heat during transport, losses during distribution, electricity transmission, and transport.

Statistical Tables

Table 2: Physical Account of Electricity

(GWh)

Year	SUPPLY			USE			
	Production	Imports	Total	Exports	Transmission Loss	Domestic Use	Total
2000	1,921.70	34.39	1,956.08	1,460.48	35.30	460.30	1,956.08
2001	1,967.75	6.90	1,974.65	1,392.62	39.14	542.89	1,974.65
2002	2,173.08	24.30	2,197.38	1,476.37	68.06	652.94	2,197.38
2003	2,377.43	18.72	2,396.15	1,695.80	93.05	607.30	2,396.15
2004	2,423.27	22.80	2,446.07	1,707.19	122.72	616.17	2,446.07
2005	2,519.56	18.43	2,537.99	1,713.61	130.18	694.20	2,537.99
2006	3,354.67	34.69	3,389.36	2,526.15	117.20	746.01	3,389.36
2007	6,421.95	22.22	6,444.17	5,372.57	121.05	950.55	6,444.17
2008	7,158.17	9.38	7,167.55	5,922.38	150.59	1,094.58	7,167.55
2009	6,922.94	64.16	6,987.10	5,404.82	165.47	1,416.81	6,987.10
2010	7,327.73	131.56	7,459.29	5,579.49	166.99	1,712.81	7,459.29
2011	7,067.55	40.32	7,107.87	5,273.10	93.98	1,740.79	7,107.87
2012	6,826.48	59.36	6,885.84	4,895.67	84.17	1,738.98	6,718.82
2013	7,549.84	112.26	7,662.10	5,557.63	43.06	2,061.41	7,662.10
2014	7,163.79	159.16	7,322.95	5,301.28	16.84	2,004.83	7,322.95
2015	7,747.17	124.52	7,871.69	5,503.07	311.48	2,057.14	7,871.69
2016	7,953.58	86.53	8,040.11	5,763.13	268.07	2,008.91	8,040.11
2017	7,729.77	91.93	7,821.70	5,700.99	65.04	2,185.79	7,951.83
2018	6,959.81	133.98	7,093.79	4,558.08	207.27	2,328.44	7,093.79
2019	8,875.87	96.37	8,972.24	6,146.60	545.01	2,280.63	8,972.24
2020	11,389.26	81.75	11,471.01	9,175.86	334.61	1,960.54	11,471.01
2021	10,821.80	25.19	10,846.99	8,074.27	61.49	2,711.23	10,846.99
2022	10,754.05	247.32	11,001.37	7,240.21	107.16	3,654.00	11,001.37
2023	10,535.60	622.00	11,157.60	5,143.84	117.78	5,895.98	11,157.60
2024	11,673.61	1,458.16	13,131.77	5,470.03	78.22	7,583.52	13,131.77

Table 3: Monetary Account of Electricity

(Mill. Nu.)

Year	SUPPLY			USE			
	Production	Imports	Total	Exports	Losses through transmission & distribution	Domestic Use	Total
2000	2,307.26	51.58	2,358.85	2,190.72	38.22	129.90	2,358.85
2001	2,237.78	6.90	2,244.68	2,097.85	48.53	98.31	2,244.68
2002	2,530.55	24.30	2,554.85	2,289.82	85.75	179.28	2,554.85
2003	2,867.94	18.72	2,886.66	2,603.33	121.62	161.71	2,886.66
2004	3,005.05	30.73	3,035.78	2,711.75	149.47	174.56	3,035.78
2005	3,956.64	32.77	3,989.41	3,479.20	209.14	301.07	3,989.41
2006	5,552.83	63.13	5,615.95	4,976.18	247.25	392.52	5,615.95
2007	10,962.37	37.73	11,000.10	10,034.33	91.71	874.06	11,000.10
2008	12,593.17	14.26	12,607.43	11,032.60	103.94	1,470.89	12,607.43
2009	10,889.85	111.03	11,000.88	10,071.00	111.57	818.31	11,000.88
2010	11,811.46	233.87	12,045.33	10,411.46	139.73	1,494.14	12,045.33
2011	10,948.33	67.18	11,015.51	9,839.21	162.12	1,014.18	11,015.51
2012	11,140.80	110.30	11,251.10	9,714.53	148.23	1,388.34	11,251.10
2013	13,051.66	214.93	13,266.59	11,013.99	149.96	2,102.64	13,266.59
2014	13,905.77	371.28	14,277.05	10,698.31	-	3,578.74	14,277.05
2015	14,258.09	341.51	14,599.60	10,991.32	-	3,608.28	14,599.60
2016	12,882.94	222.50	13,105.44	11,421.89	0.80	1,682.75	13,105.44
2017	16,292.87	440.95	16,733.82	12,396.77	1.38	4,335.67	16,733.82
2018	14,391.21	1,134.81	15,526.02	10,432.52	1.35	5,092.15	15,526.02
2019	20,293.41	596.64	20,890.05	15,605.17	0.85	5,284.03	20,890.05
2020	31,472.34	180.68	31,653.02	27,039.82	-	4,613.20	31,653.02
2021	28,273.98	75.49	28,349.48	24,197.99	306.01	3,845.48	28,349.48
2022	27,053.74	774.15	27,827.90	22,663.04	258.86	4,906.00	27,827.90
2023	25,641.10	2,973.00	28,614.10	17,793.59	285.02	10,535.49	28,614.10
2024	30,612.68	5,923.06	36,535.74	19,958.18	285.40	16,292.16	36,535.74

Table 4: Gross Electricity Consumption by Household & Industry

Year	(GWh)		Total
	Household	Industry	
2000	64.01	396.30	460.30
2001	72.09	470.81	542.89
2002	91.28	561.67	652.94
2003	88.40	518.89	607.30
2004	87.59	528.57	616.17
2005	93.23	600.97	694.20
2006	90.37	655.64	746.01
2007	110.97	839.58	950.55
2008	126.41	968.16	1,094.58
2009	182.47	1,234.34	1,416.81
2010	208.80	1,504.01	1,712.81
2011	209.53	1,531.26	1,740.79
2012	179.96	1,559.03	1,738.98
2013	251.69	1,809.72	2,061.41
2014	250.44	1,754.39	2,004.83
2015	284.31	1,772.83	2,057.14
2016	547.71	1,461.20	2,008.91
2017	359.87	1,825.92	2,185.79
2018	383.36	1,945.08	2,328.44
2019	307.54	1,973.09	2,280.63
2020	357.60	1,663.67	1,960.54
2021	385.62	2,325.61	2,711.23
2022	537.92	3,116.08	3,654.00
2023	364.00	5,531.98	5,895.98
2024	465.83	7,096.87	7,562.70

Table 5: Gross Electricity Consumption by Economic Sectors

(GWh)

Year	Total Industry	Agriculture, Livestock & Forestry	Mining & Quarrying	Manufacturing	Electricity & Water	Construction	Trade	Hotel & Restaurant	Transport, Storage & Communication	Finance, Insurance & Real Estate	Community, Social & Personal Service	Private, Social & Recreational Services
2000	396.30	0.24	1.06	335.44	12.89	2.84	7.29	0.58	1.71	0.55	33.66	0.03
2001	470.81	0.27	1.26	401.93	13.44	4.05	8.91	0.77	2.04	0.62	37.48	0.03
2002	561.67	0.36	1.82	471.99	17.88	5.70	12.48	0.93	2.74	0.72	47.03	0.04
2003	518.89	0.32	1.96	432.21	19.21	5.16	11.97	0.89	2.50	0.76	43.86	0.04
2004	528.57	0.33	1.39	444.06	16.46	5.51	13.32	1.04	2.92	0.83	42.68	0.04
2005	600.97	0.35	1.75	500.88	19.54	6.01	16.24	1.31	3.47	1.08	50.30	0.05
2006	655.64	0.34	2.54	548.71	26.10	5.29	16.38	1.69	3.32	1.16	50.05	0.05
2007	839.58	0.36	2.54	704.26	48.58	5.87	17.40	2.04	3.58	1.36	53.55	0.06
2008	968.16	0.39	3.62	813.39	56.44	5.49	19.04	3.20	4.35	1.53	60.62	0.07
2009	1,234.34	0.50	4.64	1,025.91	66.65	7.58	23.95	3.49	5.61	1.92	94.00	0.08
2010	1,504.01	0.54	5.29	1,267.70	70.60	10.25	30.02	3.87	6.38	2.10	107.19	0.09
2011	1,531.26	0.56	5.79	1,288.26	60.10	12.62	33.87	5.51	7.14	2.43	114.88	0.09
2012	1,559.03	0.51	3.52	1,345.23	45.32	14.13	34.39	5.61	6.47	2.07	101.71	0.08
2013	1,809.72	0.62	5.75	1,549.77	61.01	15.75	42.44	7.42	7.62	2.52	116.71	0.10
2014	1,754.39	1.40	4.06	1,544.64	64.19	24.33	20.24	16.91	11.98	2.63	63.28	0.73
2015	1,772.83	0.67	7.00	1,550.37	67.57	4.06	8.93	19.57	12.18	0.47	101.81	0.20
2016	1,461.20	2.25	9.47	822.76	232.12	19.07	26.34	50.41	36.64	14.71	246.76	0.66
2017	1,825.92	1.32	7.11	1,466.38	114.84	16.81	26.36	25.45	18.47	5.50	143.19	0.49
2018	1,945.08	1.41	7.57	1,562.11	122.34	17.91	28.08	27.11	19.67	5.86	152.54	0.48
2019	1,973.09	5.38	121.92	1,555.63	25.93	9.16	93.71	33.41	17.29	3.26	106.34	1.06
2020	1,602.94	6.64	153.55	1,186.23	26.38	10.72	52.25	21.33	20.10	4.06	120.57	1.11
2021	2,325.61	5.42	228.56	1,496.83	23.84	342.73	54.58	12.74	22.03	4.44	133.19	1.24
2022	3,116.08	13.62	266.29	1,756.41	50.24	423.60	133.69	33.78	59.68	12.31	363.18	3.27
2023	5,531.98	27.67	296.77	3,542.15	57.69	508.78	234.64	178.99	304.68	16.93	357.70	5.98
2024	7,096.87	52.14	223.12	5,465.15	76.03	198.48	97.04	34.17	305.35	32.99	608.94	3.47

Table 6: Gross Electricity Consumption by Industry by Economic Sectors

(Mill. Nu.)

Year	Total Industry	Agriculture, Livestock & Forestry	Mining & Quarrying	Manufacturing	Electricity & Water	Construction	Trade	Hotel & Restaurant	Transport, Storage & Communication	Finance, Insurance & Real Estate	Community, Social & Personal Service	Private, Social & Recreational Services
2000	115.36	0.07	0.39	95.92	3.87	0.95	2.19	0.16	0.55	0.16	11.09	0.01
2001	87.81	0.05	0.29	73.69	2.59	0.87	1.71	0.14	0.42	0.11	7.92	0.01
2002	159.11	0.11	0.64	131.26	5.22	1.86	3.64	0.25	0.86	0.20	15.07	0.01
2003	142.75	0.09	0.67	116.66	5.44	1.64	3.39	0.24	0.76	0.21	13.64	0.01
2004	154.58	0.10	0.51	127.53	4.96	1.86	4.01	0.29	0.94	0.24	14.13	0.01
2005	268.58	0.16	0.97	219.69	8.99	3.10	7.47	0.56	1.71	0.47	25.42	0.02
2006	354.40	0.19	1.71	291.38	14.54	3.30	9.12	0.88	1.98	0.62	30.63	0.03
2007	792.20	0.36	2.99	653.96	47.33	6.41	16.94	1.86	3.73	1.27	57.30	0.06
2008	1,334.62	0.58	6.24	1,103.70	80.36	8.76	27.10	4.27	6.64	2.09	94.80	0.09
2009	733.67	0.32	3.45	599.08	40.84	5.20	14.67	2.00	3.68	1.13	63.26	0.05
2010	1,347.94	0.51	5.92	1,117.37	65.29	10.62	27.75	3.35	6.32	1.86	108.87	0.08
2011	916.29	0.35	4.33	757.65	37.09	8.73	20.89	3.18	4.72	1.43	77.86	0.05
2012	1,252.11	0.45	4.98	1,055.89	43.61	12.62	30.32	4.96	5.83	1.73	91.64	0.07
2013	1,896.32	0.69	7.54	1,599.14	66.05	19.11	45.93	7.52	8.84	2.62	138.78	0.11
2014	3,164.20	3.02	11.26	2,687.10	122.27	58.23	41.79	44.52	29.49	6.31	158.50	1.72
2015	3,174.31	1.42	16.69	2,670.50	125.18	9.23	20.90	44.34	29.60	1.00	255.01	0.43
2016	1,223.97	1.89	7.93	689.18	194.43	15.98	22.07	42.23	30.69	12.32	206.70	0.55
2017	2,433.92	2.88	14.62	2,058.92	102.95	28.84	28.84	22.16	24.20	4.30	143.81	2.39
2018	4,522.96	9.88	17.51	3,431.72	71.36	126.62	272.17	99.87	16.92	0.93	475.71	0.26
2019	4,552.42	22.77	244.22	3,147.73	76.57	40.39	309.49	147.30	76.13	13.93	468.96	4.92
2020	2,784.57	6.49	273.67	1,792.23	28.55	410.36	65.36	15.25	26.38	5.31	159.48	1.49
2021	3,279.37	14.33	280.24	1,848.45	52.87	445.80	140.70	35.55	62.81	12.96	382.21	3.44
2022	4,226.73	21.14	226.75	2,922.54	71.10	37.50	287.35	136.76	70.68	12.94	435.41	4.57
2023	9,885.06	49.44	530.30	6,329.44	103.08	909.14	419.27	319.84	544.43	30.25	639.17	10.69
2024	11,370.05	93.98	413.03	8,682.29	112.54	266.67	168.52	69.57	452.46	54.98	1,049.02	6.97

Table 7: Total Supply & Use of Electricity by Sectors (GWh)

(GWh)

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
(I) TOTAL SUPPLY	7,871.69	8,040.11	7,821.70	7,093.79	8,972.24	11,473.54	10,846.99	11,001.37	11,157.60	13,131.77
Production	7,747.17	7,953.58	7,729.77	6,959.81	8,875.87	11,391.71	10,821.80	10,754.05	10,535.60	11,673.61
Imports	124.52	86.53	91.93	133.98	96.37	81.83	25.19	247.32	622.00	1,458.16
(II) TOTAL USE	7,871.69	8,040.11	7,821.70	7,093.79	8,972.24	11,473.54	10,846.99	11,001.37	11,157.60	13,131.77
1. Agriculture, Livestock & Forestry	0.67	2.25	1.32	1.41	5.38	6.64	5.42	13.62	27.67	52.28
2. Mining & Quarrying	7.00	9.47	7.11	7.57	121.92	153.55	228.56	266.29	296.77	223.74
3. Manufacturing	1,550.37	822.76	1,466.38	1,562.11	1,555.63	1,246.96	1,496.83	1,756.41	3,542.15	5,480.20
4. Electricity & Water	67.57	232.12	114.84	122.34	25.93	26.38	23.84	50.24	57.69	76.24
5. Construction	4.06	19.07	16.81	17.91	9.16	10.72	342.73	423.60	508.78	199.02
6. Wholesale & Retail Trade	8.93	26.34	26.36	28.08	93.71	52.25	54.58	133.69	234.64	97.30
7. Hotels & Restaurants	19.57	50.41	25.45	27.11	33.41	21.33	12.74	33.78	178.99	34.27
8. Transport, Storage & Communication	12.18	36.64	18.47	19.67	17.29	20.10	22.03	59.68	304.68	306.19
9. Finance, Insurance, Real Estate & Business Services	0.47	14.71	5.50	5.86	3.26	4.06	4.44	12.31	16.93	33.08
10. Community, Social & Personal Services	101.81	246.76	143.19	152.54	106.34	120.57	133.19	363.18	357.70	610.62
11. Private Social & Recreational Services	0.20	0.66	0.45	0.48	1.06	1.11	1.24	3.27	5.98	3.48
Household	284.31	547.71	359.87	383.36	307.54	357.60	385.62	537.92	364.00	467.11
Export	5,503.07	5,763.13	5,700.99	4,558.08	6,146.60	9,175.86	8,074.27	7,240.21	5,143.84	5,470.03
Cable Losses	311.48	268.07	(65.04)	207.27	545.01	276.41	61.49	107.16	117.78	78.22

Table 8: Total Supply & Use of Electricity by Sectors (Mill. Nu.)

(Mill. Nu.)										
Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
(I) TOTAL SUPPLY	14,599.60	14,754.32	16,444.70	15,204.68	21,707.22	31,237.43	28,349.48	27,827.90	28,614.10	36,535.74
Production	14,258.09	14,588.57	16,230.35	14,970.16	21,528.88	31,158.81	28,273.98	27,053.74	25,641.10	30,612.68
Imports	341.51	165.75	214.35	234.52	178.34	78.62	75.49	774.15	2,973.00	5,923.06
(II) TOTAL USE	14,599.60	14,754.32	16,444.70	15,204.68	21,707.22	31,237.43	28,349.48	27,827.90	28,614.10	36,535.74
1. Agriculture, Livestock & Forestry	1.42	3.25	3.70	8.99	17.58	6.49	14.33	21.14	49.44	126.98
2. Mining & Quarrying	16.69	13.66	18.78	15.92	188.57	273.67	280.24	226.75	530.30	558.02
3. Manufacturing	2,670.50	1,187.23	2,645.84	3,120.23	2,430.40	1,792.23	1,848.45	2,922.54	6,329.44	11,730.08
4. Electricity & Water	125.18	334.95	132.29	64.88	59.12	28.55	52.87	71.10	103.08	152.04
5. Construction	9.23	27.52	37.06	115.13	31.18	410.36	445.80	37.50	909.14	360.29
6. Wholesale & Retail Trade	20.90	38.01	37.06	247.47	238.96	65.36	140.70	287.35	419.27	227.68
7. Hotels & Restaurants	44.34	72.75	28.48	90.81	113.73	15.25	35.55	136.76	319.84	93.99
8. Transport, Storage & Communication	29.60	52.88	31.10	15.39	58.78	26.38	62.81	70.68	544.43	611.28
9. Finance, Insurance, Real Estate & Business Services	1.00	21.23	5.53	0.85	10.76	5.31	12.96	12.94	30.25	74.29
10. Community, Social & Personal Services	255.01	356.07	184.80	432.53	362.09	159.48	382.21	435.41	639.17	1,417.27
11. Private Social & Recreational Services	0.43	0.95	3.08	0.24	3.80	1.49	3.44	4.57	10.69	9.41
Household	433.97	790.33	553.11	517.53	564.89	461.73	566.11	679.27	650.43	930.84
Export	10,991.32	11,363.79	11,845.02	10,548.18	16,872.04	27,304.47	24,197.99	22,663.04	17,793.59	19,958.18
Cable Losses	-	491.70	918.84	26.54	755.33	686.66	306.01	258.86	285.02	285.40

Table 9: Total Supply & Use of Fossil Fuel in KL

(in KL)										
Supply										
Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Domestic Production	-	-	-	-						
Import										
1. Diesel	122,091.40	127,539.00	140,640.50	156,817.50	149,905.00	100,835.56	110,349.50	107,643.12	154,340.28	192,614.59
2. Petrol	33,880.60	35,960.00	38,960.50	46,932.00	50,882.00	34,290.55	32,819.50	36,696.73	55,806.92	71,657.05
Total Supply	155,972.00	163,499.00	179,601.00	203,749.50	200,787.00	135,126.11	143,169.00	144,339.85	210,147.20	264,271.64
Use										
Major sectors	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1. Agriculture, Livestock & Forestry	16,838.55	19,471.82	23,289.57	21,628.99	20,677.51	13,909.02	15,219.84	14,848.07	21,290.40	26,570.77
Diesel	16,827.71	19,457.05	23,273.36	21,613.96	20,661.22	13,898.04	15,209.34	14,836.32	21,272.53	26,547.83
Petrol	10.85	14.77	16.21	15.03	16.29	10.98	10.51	11.75	17.87	22.94
2. Industry	26,626.96	31,787.68	38,583.40	34,222.28	32,752.37	22,031.72	24,080.25	23,519.70	33,743.35	42,124.14
Diesel	26,409.68	31,551.73	38,352.93	33,921.31	32,426.06	21,811.81	23,869.78	23,284.36	33,385.46	41,664.60
Petrol	217.28	235.95	230.47	300.98	326.31	219.91	210.47	235.34	357.89	459.54
3. Services	62,132.52	64,184.98	68,512.88	79,903.77	76,556.23	51,498.41	56,220.80	54,977.79	78,920.52	98,550.08
Diesel	61,149.61	63,077.83	67,397.86	78,542.21	75,080.08	50,503.60	55,268.66	53,913.17	77,301.49	96,471.22
Petrol	982.92	1,107.14	1,115.03	1,361.56	1,476.15	994.81	952.14	1,064.62	1,619.03	2,078.86
3. HH consumption	30,527.70	34,380.85	37,237.01	41,811.81	44,553.44	30,018.29	29,265.52	32,114.32	48,476.38	62,029.54
Diesel	4,719.66	6,650.35	7,405.85	6,062.06	5,794.85	3,897.98	4,265.76	4,161.14	5,966.30	7,445.86
Petrol	25,808.04	27,730.50	29,831.16	35,749.74	38,758.59	26,120.31	24,999.76	27,953.18	42,510.07	54,583.67
4. Re-Export	19,846.27	13,673.67	11,978.14	26,182.66	26,247.45	17,668.67	18,382.59	18,879.98	27,716.55	34,997.11
1. Diesel	12,984.75	6,802.03	4,210.50	16,677.96	15,942.80	10,724.13	11,735.96	11,448.13	16,414.50	20,485.07
2. Petrol	6,861.52	6,871.64	7,767.64	9,504.70	10,304.66	6,944.54	6,646.63	7,431.85	11,302.05	14,512.03
Total use of Diesel	122,091.40	127,539.00	140,640.50	156,817.50	149,905.00	100,835.56	110,349.50	107,643.12	154,340.28	192,614.59
Total use of Petrol	33,880.60	35,960.00	38,960.50	46,932.00	50,882.00	34,290.55	32,819.50	36,696.73	55,806.92	71,657.05
Total use	155,972.00	163,499.00	179,601.00	203,749.50	200,787.00	135,126.11	143,169.00	144,339.85	210,147.20	264,271.64

Table 10: Supply & Use of Fossil Fuel in %

(Percentage)

Supply										
Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Domestic Production	-	-	-	-						
Import										
1. Diesel	78.28	78.01	78.31	76.97	74.66	74.62	77.08	74.58	73.44	72.89
2. Petrol	21.72	21.99	21.69	23.03	25.34	25.38	22.92	25.42	26.56	27.11
Total Supply	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Use										
Major Sectors	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1. Agriculture, Livestock & Forestry	10.80	11.91	12.97	12.21	12.99	21.50	10.63	10.29	10.13	10.05
Diesel	13.78	15.26	16.55	12.95	14.34	24.27	13.78	13.78	13.78	13.78
Petrol	0.03	0.04	0.04	9.75	8.99	13.35	0.03	0.03	0.03	0.03
2. Industry	17.07	19.44	21.48	19.04	20.61	20.08	16.82	16.29	16.06	15.94
Diesel	21.63	24.74	27.27	24.59	27.44	26.75	21.63	21.63	21.63	21.63
Petrol	0.64	0.66	0.59	0.49	0.51	0.49	0.64	0.64	0.64	0.64
3. Services	39.84	39.26	38.15	33.38	35.71	32.74	39.27	38.09	37.55	37.29
Diesel	50.09	49.46	47.92	42.65	47.00	43.10	50.09	50.09	50.09	50.09
Petrol	2.90	3.08	2.86	2.42	2.45	2.27	2.90	2.90	2.90	2.90
3. HH consumption	19.57	21.03	20.73	18.12	19.42	18.49	20.44	22.25	23.07	23.47
Diesel	3.87	5.21	5.27	4.68	5.49	5.30	3.87	3.87	3.87	3.87
Petrol	76.17	77.11	76.57	63.03	60.48	57.26	76.17	76.17	76.17	76.17
Re-Export	12.72	8.36	6.67	17.25	11.27	7.19	12.84	13.08	13.19	13.24
1. Diesel	10.64	5.33	2.99	15.13	5.73	0.58	10.64	10.64	10.64	10.64
2. Petrol	20.25	19.11	19.94	24.31	27.57	26.63	20.25	20.25	20.25	20.25
Total use of Diesel	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total use of Petrol	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total use	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 11: Supply & Use of Fossil Fuel (Diesel and Petrol)

(Nu. in million)

Supply										
Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Production	-	-	-	-	-	-	-	-	-	-
Imports	6,730.68	7,307.19	8,479.01	10,348.01	9,946.51	6,338.69	8,515.98	11,373.61	13,393.55	15,177.83
1. Diesel at basic price	5,024.82	5,549.46	6,505.27	7,965.84	7,602.88	4,678.80	6,485.41	8,735.34	10,000.47	11,218.98
2. Petrol at basic price	1,705.86	1,757.73	1,973.74	2,382.17	2,343.63	1,659.89	2,030.57	2,638.27	3,393.08	3,958.84
Total Margin	1,233.21	1,669.84	1,668.68	1,702.96	1,982.51	744.98	999.00	1,333.54	1,333.54	2,998.62
Trade and Transport margin (Diesel)	966.20	1,113.18	1,272.15	1,297.37	1,316.47	538.43	746.33	1,005.25	1,172.54	2,129.21
Trade and Transport margin (Petrol)	267.01	556.66	396.52	405.59	666.04	206.54	252.67	328.29	422.21	869.41
Supply at market price (Diesel)	5,991.02	6,662.64	7,777.42	9,263.21	8,919.35	5,217.23	7,231.74	9,740.59	11,173.01	13,348.19
Supply at market price (Petrol)	1,972.87	2,314.39	2,370.26	2,787.76	3,009.67	1,866.43	2,283.24	2,966.56	3,815.29	4,828.25
Total Supply at market Price	7,963.89	8,977.02	10,147.69	12,050.97	11,929.02	7,083.67	9,514.98	12,707.15	14,988.30	18,176.44
Use										
Major sectors	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1. Agriculture, Livestock & Forestry	826.37	1,017.39	1,288.00	1,557.07	1,552.69	951.74	1,197.67	1,613.12	1,846.92	2,206.59
Diesel	825.74	1,016.44	1,287.02	1,556.11	1,551.76	951.15	1,196.72	1,611.88	1,845.33	2,204.59
Petrol	0.63	0.95	0.99	0.95	0.93	0.58	0.95	1.23	1.59	2.01
2. Industry	1,308.58	1,663.45	2,134.94	2,291.18	2,462.29	1,485.58	1,985.62	2,673.83	3,063.55	3,661.57
Diesel	1,295.92	1,648.26	2,120.92	2,277.58	2,447.08	1,475.37	1,972.11	2,656.28	3,040.98	3,633.01
Petrol	12.65	15.19	14.02	13.61	15.21	10.21	13.51	17.55	22.57	28.56
3. Services	3,099.31	3,424.95	3,859.73	4,087.26	4,338.38	2,480.81	3,530.95	4,752.79	5,453.13	6,522.49
Diesel	3,042.08	3,353.69	3,791.90	4,019.83	4,264.70	2,428.42	3,465.60	4,667.89	5,343.94	6,384.31
Petrol	57.24	71.26	67.84	67.43	73.68	52.39	65.34	84.90	109.19	138.18
3. HH consumption	1,734.40	2,132.15	2,224.40	2,190.81	2,309.49	1,498.64	2,129.03	2,784.35	3,508.49	4,398.41
Diesel	231.59	347.41	409.54	433.78	489.24	293.61	380.81	512.92	587.21	701.52
Petrol	1,502.80	1,784.73	1,814.86	1,757.03	1,820.24	1,205.03	1,748.22	2,271.43	2,921.28	3,696.88
Re-Export	995.24	739.09	640.61	1,924.65	1,266.17	666.89	671.72	883.06	1,116.21	1,387.38
1. Diesel	595.70	296.83	168.05	975.92	166.56	68.67	216.50	291.61	355.55	424.77
2. Petrol	399.55	442.26	472.56	948.73	1,099.61	598.22	455.21	591.45	760.66	962.62
Total use of Diesel	5,991.02	6,662.64	7,777.42	9,263.21	8,919.35	5,217.23	7,231.74	9,740.59	11,173.01	13,348.19
Total use of Petrol	1,972.87	2,314.39	2,370.26	2,787.76	3,009.67	1,866.44	2,283.24	2,966.56	3,815.29	4,828.25
Total use	7,963.89	8,977.02	10,147.69	12,050.97	11,929.02	7,083.67	9,514.98	12,707.15	14,988.30	18,176.44

Table 12: Supply & Use of Kerosene

(in KL)

Supply										
Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Domestic Production	-	-	-	-	-	-				
Import	4,611.00	4,791.00	4,238.00	3,597.00	2,886.00	1,794.00	1,730.37	1,144.10	601.54	252.01
Total Supply	4,611.00	4,791.00	4,238.00	3,597.00	2,886.00	1,794.00	1,730.37	1,144.10	601.54	252.01
Use										
Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Household	4,599.00	4,755.00	4,226.00	3,597.00	2,886.00	1,782.00	1,730.37	1,144.10	601.54	252.01
Industries	12.00	36.00	12.00	-	-	12.00	-	-	-	-
Total Use	4,611.00	4,791.00	4,238.00	3,597.00	2,886.00	1,794.00	1,730.37	1,144.10	601.54	252.01

Table 13: Growth in Supply & Use of Kerosene in %

(in percent)

Supply	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Domestic Production	-	-	-	-	-	-	-	-	1.00	
Import	(19.02)	3.90	(11.54)	(15.13)	(19.77)	(37.84)	(3.55)	(33.88)	(47.42)	(58.11)
Total Supply	(19.02)	3.90	(11.54)	(15.13)	(19.77)	(37.84)	(3.55)	(33.88)	(47.42)	(58.11)
Use										
Household	(18.93)	3.39	(11.13)	(14.88)	(19.77)	(38.25)	(2.90)	(33.88)	(47.42)	(58.11)
Industries	(42.86)	200.00	(66.67)	(100.00)	-	-	-	-	-	
Total Use	(19.02)	3.90	(11.54)	(15.13)	(19.77)	(37.84)	(3.55)	(33.88)	(47.42)	(58.11)

Table 14: Supply & Use of Kerosene

(Million Nu.)

Supply	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Domestic Production	-	-	-	-	-	-	-	-	-	-
Import	60.69	66.06	98.41	79.34	79.93	43.76	60.78	73.63	37.83	13.84
Total Supply	60.69	66.06	98.41		79.93	43.76	60.78	73.63	37.83	13.84
Losses	-	-	-	-	-	-	-	-	-	-
Trade and Transport margin (TTM)	11.77	11.61	4.65	34.00	29.42	12.18	16.91	20.49	10.59	3.88
Total Supply (at market price)	72.46	77.67	103.06	34.00	109.35	55.94	77.69	94.12	48.42	17.72
Use										
Household	72.27	77.09	102.77	113.34	109.35	55.56	77.69	94.12	48.42	17.72
Industries	0.19	0.58	0.29	-	-	0.37	-	-		
Total use (3+4)	72.46	77.67	103.06	113.34	109.35	55.94	77.69	94.12	48.42	17.72

Table 15: Supply & Use of LPG in MT

(in MT)

Supply										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Domestic Production	-	-	-	-	-	-	-	-	-	-
Import	8,113.14	8,711.57	9,298.54	10,002.22	10,341.24	9,685.51	8,889.64	8,331.65	8,193.10	8,978.20
Total Supply	8,113.14	8,711.57	9,298.54	10,002.22	10,341.24	9,685.51	8,889.64	8,331.65	8,193.10	8,978.20
Use										
Household	7,302.60	7,593.23	8,046.82	8,728.14	8,932.34	9,009.20	8,411.72	7,783.34	7,534.75	8,386.66
Industries*	810.54	1,118.34	1,251.72	1,274.08	1,408.96	676.31	477.92	548.31	658.36	591.54
Total Use	8,113.14	8,711.57	9,298.54	10,002.22	10,341.30	9,685.51	8,889.64	8,331.65	8,193.10	8,978.20

Table 16: Supply & Use of LPG in %

(in percent)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Domestic Production	-	-	-	-	-	-	-	-	-	-
Import	7.51	7.38	6.74	7.57	3.39	(6.34)	(8.22)	(6.28)	(1.66)	9.58
Total Supply	7.51	7.38	6.74	7.57	3.39	(6.34)	(8.22)	(6.28)	(1.66)	9.58
Use										
Household	3.88	3.98	5.97	8.47	2.34	0.86	(6.63)	(7.47)	(3.19)	11.31
Industries	56.90	37.97	11.93	1.79	10.59	(52.00)	(29.33)	14.73	20.07	(10.15)
Total Use	7.51	7.38	6.74	7.57	3.39	(6.34)	(8.22)	(6.28)	(1.66)	9.58

Table 17: Supply & Use of LPG in Million Nu.

(Million Nu.)

Supply	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Domestic Production	-	-	-	-	-	-	-	-	-	-
Import	236.10	254.94	292.22	322.68	349.73	353.06	472.16	537.04	505.97	487.29
Total Supply	236.10	254.94	292.22	322.68	349.73	353.06	472.16	537.04	505.97	487.29
Losses	-	-	-	-	-	-	-	-	-	-
Trade and Transport margin (TTM)	49.19	46.48	47.67	46.78	59.07	78.33	104.75	119.14	91.87	88.48
Total Supply (at market price)	285.29	301.42	339.89	369.46	408.80	431.39	576.91	656.19	597.84	575.77
Use	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Household	190.00	198.26	222.50	245.13	331.52	350.78	2,458.46	528.85	540.69	517.92
Industries	46.10	56.68	69.72	77.55	77.28	78.28	93.85	127.34	57.15	57.85
Total use (3+4)	236.10	254.94	292.22	322.68	408.80	429.06	2,552.31	656.19	597.84	575.77

Table 18: Supply and Consumption of Fuelwood in Cubic Meters.

										(m3)
SUPPLY	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1. Supply by NRDCCL	40,491.32	38,184.81	34,451.54	32,949.91	37,537.54	32,124.38	44,477.19	43,850.96	44,102.01	36,330.76
2. Supply by DoFPS, MoENR	85,002.99	102,109.87	97,744.08	47,367.00	58,055.00	56,884.48	41,199.61	55,456.27	78,464.89	95,871.58
Total Supply (1+2)	125,494.31	140,294.68	132,195.62	80,316.91	95,592.54	89,008.86	85,676.80	99,307.23	122,566.90	132,202.34
USE										
3. NRDCCL Disposal (3.1+3.2)	40,491.32	38,184.81	34,451.54	32,949.91	37,537.54	32,124.38	44,477.19	43,850.96	44,102.01	36,330.76
3.1 Household	5,547.75	5,231.73	4,720.23	4,283.49	4,879.88	4,176.17	5,782.03	5,700.62	21,609.98	17,802.07
3.2 Industries	34,943.57	32,953.08	29,731.31	28,666.42	32,657.66	27,948.21	38,695.16	38,150.34	22,492.03	18,528.69
4. DoFPS, MoAF Disposal (4.1+4.2)	85,002.99	102,109.87	97,744.08	47,367.00	58,055.00	56,884.48	41,199.61	55,456.27	78,464.89	95,871.58
4.1 Household (4.1.1+4.1.2)	48,367.55	60,662.19	57,395.31	35,473.00	40,444.00	43,198.92	18,801.66	18,801.66	43,940.34	53,688.08
4.1.1 For funeral purposes										
4.1.2 For other services										
4.2 Industries	36,635.43	41,447.68	40,348.76	11,894.00	17,611.00	13,685.56	22,397.95	22,397.95	34,524.55	42,183.50
Total Household	53,915.30	65,893.92	62,115.54	39,756.49	45,323.88	47,375.09	24,583.69	24,502.28	65,550.32	71,490.16
Total Industries	71,579.01	74,400.76	70,080.07	40,560.42	50,268.66	41,633.77	61,093.11	60,548.29	57,016.58	60,712.18
Total Use	125,494.31	140,294.68	132,195.62	80,316.91	95,592.54	89,008.86	85,676.80	85,050.57	122,566.90	132,202.34

Table 19: Supply and Consumption of Fuelwood in %

SUPPLY	(percentage)									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1. Supply by NRDCCL	32.27	27.22	26.06	41.02	39.27	36.09	51.91	44.16	35.98	27.48
2. Supply by DoFPS, MoENR	67.73	72.78	73.94	58.98	60.73	63.91	48.09	55.84	64.02	72.52
Total Supply (1+2)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
USE										
3. NRDCCL Disposal (3.1+3.2)	32.27	27.22	26.06	41.02	39.27	36.09	51.91	51.56	35.98	27.48
3.1 Household	4.42	3.73	3.57	5.33	5.10	4.69	6.75	6.70	17.63	13.47
3.2 Industries	27.84	23.49	22.49	35.69	34.16	31.40	45.16	44.86	18.35	14.02
4. DoFPS, MoENR Disposal (4.1+4.2)	67.73	72.78	73.94	58.98	60.73	63.91	48.09	65.20	64.02	72.52
4.1 Household	38.54	43.24	43.42	44.17	42.31	48.53	21.94	22.11	35.85	40.61
4.1.1 For funeral purposes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.1.2 For other services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.2 Industries	29.19	29.54	30.52	14.81	18.42	15.38	26.14	26.33	28.17	31.91
Total Household	42.96	46.97	46.99	49.50	47.41	53.23	28.69	28.81	53.48	54.08
Total Industries	57.04	53.03	53.01	50.50	52.59	46.77	71.31	71.19	46.52	45.92
Total Use (3+4)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 20: Physical account for Timber production

										(Cft.)
SUPPLY	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1. Supply by NRDCCL	1,954,917.00	1,770,200.20	1,567,282.39	1,849,307.60	2,154,096.96	2,664,408.52	1,866,326.13	2,057,038.83	2,444,646.57	3,499,148.47
2. Supply by DoFPS, MoENR	14,233,257.87	6,529,630.09	5,172,512.81	3,099,780.99	7,146,269.25	5,288,118.53	2,699,310.52	2,513,907.29	5,160,963.71	5,906,988.16
Total Supply (1+2)	16,188,174.87	8,299,830.29	6,739,795.20	4,949,088.59	9,300,366.21	7,952,527.05	4,565,636.65	4,570,946.12	7,605,610.28	9,406,136.63
USE	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
3. NRDCCL	1,954,917.00	1,770,200.20	1,567,282.39	1,849,307.60	2,154,096.96	2,664,408.52	1,866,326.13	2,057,038.83	2,444,646.57	3,499,148.47
3.1. Commercial	1,954,917.00	1,770,200.20	1,567,282.39	1,849,307.60	2,154,096.96	2,664,408.52	1,866,326.13	2,057,038.83	2,444,646.57	3,499,148.47
4. DoFPS, MoENR	14,233,257.87	6,529,630.09	5,172,512.81	3,099,781.03	7,146,269.25	5,288,118.53	2,699,310.52	2,513,907.29	5,160,963.71	5,906,988.16
4.1. Commercial	1,506,804.07	2,472,601.66	1,408,914.38	537,066.00	2014128.226	1479774.923	1323792.365	1,301,247.81	2,536,719.15	3,486,623.85
4.2. Concessional	12,706,721.83	4,015,903.40	3,588,205.42	2,553,111.55	5132141.022	3808343.605	1375518.159	1,212,659.48	2,624,244.57	2,310,677.10
4.3. Free	19,731.97	41,125.03	175,393.01	9,603.48	-	-	-			109,687.21
Total Use (3+4)	16,188,174.87	8,299,830.29	6,739,795.20	4,949,088.63	9,300,366.21	7,952,527.05	4,565,636.65	4,570,946.12	7,605,610.28	9,406,136.63

Table 21: Physical account for Sand production

(Million Cft.)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Stock (1+2)	15.54	17.94	21.21	19.31	21.21	25.05	24.31	35.41	20.11	19.40
1. Opening Stock	4.29	3.46	2.62	1.59	2.94	3.91	4.74	1.71	2.84	3.27
2. Additions to stock (via production)	11.25	14.48	18.59	17.71	18.27	21.13	19.56	33.70	17.28	16.13
Total Reductions in stock (3)	11.66	15.32	17.69	15.96	16.93	20.30	22.59	32.58	16.85	14.69
3. Disposal	11.66	15.32	17.69	15.96	16.93	20.30	22.59	32.58	16.85	14.69
Closing stock (1+2-3)	3.46	2.62	1.59	2.94	3.91	4.74	1.71	2.84	3.27	4.71

Table 22: Physical Asset Account for Coal

(Million MT)

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Stock	0.54	0.45	0.33	0.17	(0.02)	(0.21)	(0.28)	-	-	-
Additions to Stock (+)										
Discoveries	-	-	-	-	-	-	-	-	-	-
Upward re-appraisals	-	-	-	-	-	-	-	-	-	-
Reclassifications	-	-	-	-	-	-	-	-	-	-
Total additions to stock	-	-	-	-	-	-	-	-	-	-
Reductions in Stock (-)										
Extractions	0.09	0.12	0.16	0.19	0.19	0.07	0.11	0.16	0.11	0.17
Catastrophic losses	-	-	-	-	-	-	-	-	-	-
Downward re-appraisals	-	-	-	-	-	-	-	-	-	-
Reclassifications	-	-	-	-	-	-	-	-	-	-
Total reductions in stock	0.09	0.12	0.16	0.19	0.19	0.07	0.11	0.16	0.11	0.17
Revaluations	-	-	-	-	-	-	-	-	-	-
Closing Stock	0.45	0.33	0.17	(0.02)	(0.21)	(0.28)	(0.40)	-	-	-

Table 23: Physical Asset Account for Dolomite

(Million MT)

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Stock	14,534.90	14,532.24	14,529.87	14,527.33	14,524.51	14,521.49	14,520.25	14,518.21	14,515.45	14,512.51
Additions to Stock										
Discoveries	-	-	-	-	-	-	-	-	-	-
Upward re-appraisals	-	-	-	-	-	-	-	-	-	-
Reclassifications	-	-	-	-	-	-	-	-	-	-
Total additions to stock	-	-	-	-	-	-	-	-	-	-
Reductions in Stock										
Extractions	2.66	2.37	2.54	2.82	3.03	1.23	2.04	2.77	2.94	2.76
Catastrophic losses	-	-	-	-	-	-	-	-	-	-
Downward re-appraisals	-	-	-	-	-	-	-	-	-	-
Reclassifications	-	-	-	-	-	-	-	-	-	-
Total reductions in stock	2.66	2.37	2.54	2.82	3.03	1.23	2.04	2.77	2.94	2.76
Revaluations	-	-	-	-	-	-	-	-	-	-
Closing Stock	14,532.24	14,529.87	14,527.33	14,524.51	14,521.49	14,520.25	14,518.21	14,515.45	14,512.51	14,509.75

Table 24: Physical Asset Account for Limestone

(Million MT)

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Stock	160.49	159.64	158.38	157.14	155.80	154.26	153.44	152.15	151.18	149.95
Additions to Stock										
Discoveries	-	-	-	-	-	-	-	-	-	-
Upward re-appraisals	-	-	-	-	-	-	-	-	-	-
Reclassifications	-	-	-	-	-	-	-	-	-	-
Total additions to stock	-	-	-	-	-	-	-	-	-	-
Reductions in Stock										
Extractions	0.85	1.26	1.24	1.34	1.55	0.82	1.30	0.96	1.23	1.03
Catastrophic losses	-	-	-	-	-	-	-			
Downward re-appraisals	-	-	-	-	-	-	-			
Reclassifications	-	-	-	-	-	-	-			
Total reductions in stock	0.85	1.26	1.24	1.34	1.55	0.82	1.30	0.96	1.23	1.03
Revaluations	-	-	-	-	-	-	-			
Closing Stock	159.64	158.38	157.14	155.80	154.26	153.44	152.15	151.18	149.95	148.91

Table 25: Physical Asset Account for Gypsum

(Million MT)

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Stock	132.46	132.07	131.75	131.42	130.96	130.47	130.14	129.74	129.34	128.24
Additions to Stock										
Discoveries	-	-	-	-	-	-	-	-	-	-
Upward re-appraisals	-	-	-	-	-	-	-	-	-	-
Reclassifications	-	-	-	-	-	-	-	-	-	-
Total additions to stock	-	-	-	-	-	-	-	-	-	-
Reductions in Stock										
Extractions	0.39	0.32	0.33	0.46	0.49	0.33	0.40	0.40	1.10	0.51
Catastrophic losses	-	-	-	-	-	-	-			
Downward re-appraisals	-	-	-	-	-	-	-			
Reclassifications	-	-	-	-	-	-	-			
Total reductions in stock	0.39	0.32	0.33	0.46	0.49	0.33	0.40	0.40	1.10	0.51
Revaluations	-	-	-	-	-	-	-			
Closing Stock	132.07	131.75	131.42	130.96	130.47	130.14	129.74	129.34	128.24	127.72

Table 26: Physical Asset Account for Quartzite

(Million MT)

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Stock	4.71	4.63	4.54	4.36	4.21	4.07	3.92	3.80	3.65	3.41
Additions to Stock										
Discoveries	-	-	-	-	-	-	-			
Upward re-appraisals	-	-	-	-	-	-	-			
Reclassifications	-	-	-	-	-	-	-			
Total additions to stock	-	-	-	-	-	-	-			
Reductions in Stock										
Extractions	0.08	0.09	0.18	0.15	0.14	0.15	0.12	0.15	0.24	0.25
Catastrophic losses	-	-	-	-	-	-	-			
Downward re-appraisals	-	-	-	-	-	-	-			
Reclassifications	-	-	-	-	-	-	-			
Total reductions in stock	0.08	0.09	0.18	0.15	0.14	0.15	0.12	0.15	0.24	0.25
Revaluations	-	-	-	-	-					
Closing Stock	4.63	4.54	4.36	4.21	4.07	3.92	3.80	3.65	3.41	3.16

Table 27: Physical Asset Account for Talc

(Million MT)

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Stock	0.04	0.03	0.03	0.02	(0.05)	(0.05)	-	-	-	
Additions to Stock										
Discoveries	-	-	-	-	-	-	-			
Upward re-appraisals	-	-	-	-	-	-	-			
Reclassifications	-	-	-	-	-	-	-			
Total additions to stock	-	-	-	-	-	-	-			
Reductions in Stock										
Extractions	0.0100	0.0000	0.0100	0.0700	0.0014	0.0010	0.0007	0.0007	0.0004	0.0030
Catastrophic losses	-	-	-	-	-	-	-			
Downward re-appraisals	-	-	-	-	-	-	-			
Reclassifications	-	-	-	-	-	-	-			
Total reductions in stock	0.01	-	0.01	0.07	0.00	0.001	0.001	0.001	0.000	0.003
Revaluations	-	-	-	-	-	-	-			
Closing Stock	0.03	0.03	0.02	(0.05)	(0.05)	(0.05)	-	-	-	-

Table 28: Physical Asset Account for Iron-ore

(Million MT)

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Stock	2.65	2.61	2.58	2.55	2.51	2.47	2.46	2.43	2.43	2.41
Additions to Stock										
Discoveries	-	-	-	-	-	-	-			
Upward re-appraisals	-	-	-	-	-	-	-			
Reclassifications	-	-	-	-	-	-	-			
Total additions to stock	-	-	-	-	-	-	-			
Reductions in Stock										
Extractions	0.04	0.03	0.03	0.04	0.04	0.01	0.03	0.00	0.01	0.01
Catastrophic losses	-	-	-	-	-	-	-			
Downward re-appraisals	-	-	-	-	-	-	-			
Reclassifications	-	-	-	-	-	-	-			
Total reductions in stock	0.04	0.03	0.03	0.04	0.04	0.01	0.03	0.00	0.01	0.01
Revaluations	-	-	-	-	-	-	-			
Closing Stock	2.61	2.58	2.55	2.51	2.47	2.46	2.43	2.43	2.41	2.40

Table 29: Monetary Asset Account for Coal*(Million Nu.)*

	Extraction year	Quantity	ressource rent per unit	Total ressource rent from extraction	Discount rate, 12 per cent	Discount factor	Net present value (NPV) of extraction
0	2020	0.12	2,247.83	277.81	0.12	1.00	277.81
1	2021	0.12	2,247.83	277.81	0.12	0.89	248.05
2	2022	0.12	2,247.83	277.81	0.12	0.80	221.47
3	2023	0.12	2,247.83	277.81	0.12	0.71	197.74
4	2024	0.12	2,247.83	277.81	0.12	0.64	176.56
5	2025	0.12	2,247.83	277.81	0.12	0.57	157.64
6	2026	0.12	2,247.83	277.81	0.12	0.51	140.75

Table 30: Monetary Asset Account for Dolomite

	Extraction year	Quantity	ressource rent per unit	Total ressource rent from extraction	Discount rate, 12 per cent	Discount factor	Net present value (NPV) of extraction
0	2021	967.88	293.99	284,543.81	0.12	1.00	284,543.81
1	2022	967.88	293.99	284,543.81	0.12	0.89	254,056.97
2	2022	967.88	293.99	284,543.81	0.12	0.80	226,836.58
3	2023	967.88	293.99	284,543.81	0.12	0.71	202,532.66
4	2023	967.88	293.99	284,543.81	0.12	0.64	180,832.73
5	2024	967.88	293.99	284,543.81	0.12	0.57	161,457.80
6	2024	967.88	293.99	284,543.81	0.12	0.51	144,158.75
7	2025	967.88	293.99	284,543.81	0.12	0.45	128,713.17
8	2025	967.88	293.99	284,543.81	0.12	0.40	114,922.47
9	2026	967.88	293.99	284,543.81	0.12	0.36	102,609.35

Table 31: Monetary Asset Account for Limestone*(Million Nu.)*

	Extraction year	Quantity	ressource rent per unit	Total ressource rent from extraction	Discount rate, 12 per cent	Discount factor	Net present value (NPV) of extraction
0	2021	10.14	5,019.86	50,916.63	0.12	1.00	50,916.63
1	2022	10.14	5,019.86	50,916.63	0.12	0.89	45,461.27
2	2023	10.14	5,019.86	50,916.63	0.12	0.80	40,590.42
3	2024	10.14	5,019.86	50,916.63	0.12	0.71	36,241.45
4	2025	10.14	5,019.86	50,916.63	0.12	0.64	32,358.44
5	2026	10.14	5,019.86	50,916.63	0.12	0.57	28,891.46
6	2027	10.14	5,019.86	50,916.63	0.12	0.51	25,795.95
7	2028	10.14	5,019.86	50,916.63	0.12	0.45	23,032.10
8	2029	10.14	5,019.86	50,916.63	0.12	0.40	20,564.37
9	2030	10.14	5,019.86	50,916.63	0.12	0.36	18,361.05

Table 32 Monetary Asset Account for Gypsum*(Million Nu.)*

	Extraction year	Quantity	ressource rent per unit	Total ressource rent from extraction	Discount rate, 12 per cent	Discount factor	Net present value (NPV) of extraction
0	2021	8.65	813.46	7,035.69	0.12	1.00	7,035.69
1	2022	8.65	813.46	7,035.69	0.12	0.89	6,281.86
2	2023	8.65	813.46	7,035.69	0.12	0.80	5,608.81
3	2024	8.65	813.46	7,035.69	0.12	0.71	5,007.86
4	2025	8.65	813.46	7,035.69	0.12	0.64	4,471.31
5	2026	8.65	813.46	7,035.69	0.12	0.57	3,992.24
6	2027	8.65	813.46	7,035.69	0.12	0.51	3,564.50
7	2028	8.65	813.46	7,035.69	0.12	0.45	3,182.59
8	2029	8.65	813.46	7,035.69	0.12	0.40	2,841.60
9	2030	8.65	813.46	7,035.69	0.12	0.36	2,537.14

Table 33: Monetary Asset Account for Quartzite*(Million Nu.)*

	Extraction year	Quantity	ressource rent per unit	Total ressource rent from extraction	Discount rate, 12 per cent	Discount factor	Net present value (NPV) of extraction
0	2021	0.25	3,220.00	815.73	0.12	1.00	815.73
1	2022	0.25	3,220.00	815.73	0.12	0.89	728.33
2	2023	0.25	3,220.00	815.73	0.12	0.80	650.29
3	2024	0.25	3,220.00	815.73	0.12	0.71	580.62
4	2025	0.25	3,220.00	815.73	0.12	0.64	518.41
5	2026	0.25	3,220.00	815.73	0.12	0.57	462.87
6	2027	0.25	3,220.00	815.73	0.12	0.51	413.27
7	2028	0.25	3,220.00	815.73	0.12	0.45	368.99
8	2029	0.25	3,220.00	815.73	0.12	0.40	329.46
9	2030	0.25	3,220.00	815.73	0.12	0.36	294.16

Table 34: Monetary Asset Account for Talc

(Million Nu.)

	Extraction year	Quantity	ressource rent per unit	Total ressource rent from extraction	Discount rate, 12 per cent	Discount factor	Net present value (NPV) of extraction
0	2021	0.02	468.50	7.87	0.12	1.00	7.87
1	2022	0.02	468.50	7.87	0.12	0.89	7.03
2	2023	0.02	468.50	7.87	0.12	0.80	6.28
3	2024	0.02	468.50	7.87	0.12	0.71	5.60
4	2025	0.02	468.50	7.87	0.12	0.64	5.00
5	2026	0.02	468.50	7.87	0.12	0.57	4.47

Table 35: Monetary Asset Account for Iron-ore

(Million Nu.)

	Extraction year	Quantity	ressource rent per unit	Total ressource rent from extraction	Discount rate, 12 per cent	Discount factor	Net present value (NPV) of extraction
0	2021	0.16	468.50	75.88	0.12	1.00	75.88
1	2022	0.16	468.50	75.88	0.12	0.89	67.75
2	2023	0.16	468.50	75.88	0.12	0.80	60.49
3	2024	0.16	468.50	75.88	0.12	0.71	54.01
4	2025	0.16	468.50	75.88	0.12	0.64	48.22
5	2026	0.16	468.50	75.88	0.12	0.57	43.06
6	2027	0.16	468.50	75.88	0.12	0.51	38.44
7	2028	0.16	468.50	75.88	0.12	0.45	34.33
8	2029	0.16	468.50	75.88	0.12	0.40	30.65
9	2030	0.16	468.50	75.88	0.12	0.36	27.36

Table 36: Energy Supply, Consumption, and Trade

	KToE									
Energy Supply, Consumption & Trade	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Production	742.18	612.73	792.51	707.30	871.51	1,088.77	1,005.75	1,100.92	1,015.00	1,139.01
Hydro-electricity	666.03	512.35	663.83	598.19	762.35	979.30	930.55	979.30	905.90	1,001.96
Wind	-	0.06	0.10	0.17	0.22	0.10	-	-	0.02	0.00
Solar	-	-	-	-	-	-	-	-	0.05	0.28
Coal	57.36	79.33	108.79	108.79	108.79	96.04	75.13	106.82	76.75	114.15
Firewood	18.70	20.91	19.70	0.05	0.05	13.27	0.06	14.80	32.29	22.61
Briquettee	0.09	0.09	0.10	0.10	0.10	0.07	0.02	-	-	-
Consumption	412.57	443.81	491.19	521.70	531.69	461.33	534.95	682.61	834.53	1,026.93
Hydro-electricity	190.91	187.21	200.33	200.33	200.33	218.40	244.71	314.19	506.96	652.07
Wind	-	0.06	0.10	0.17	0.22	0.10	-	-	0.02	0.00
Solar	-	-	-	-	-	-	-	-	0.05	0.28
Diesel	109.12	113.96	125.66	140.12	133.94	90.10	98.60	94.80	137.40	171.98
Petrol	27.60	29.30	31.74	38.24	41.45	27.94	26.74	29.90	45.47	58.38
Kerosene	4.12	4.28	3.64	3.09	2.48	1.54	1.42	0.98	0.52	0.22
ATF	2.83	2.81	3.39	4.15	4.04	3.39	0.99	1.96	2.89	4.50
LPG	5.46	5.87	10.50	9.66	10.09	10.50	10.37	9.41	9.26	10.14
Coal	53.72	79.33	96.04	125.83	124.45	96.04	152.02	216.56	99.67	106.75
Firewood	18.70	20.91	19.70	0.03	14.60	13.27	0.06	14.80	32.29	22.61
Briquettee	0.09	0.09	0.10	0.09	0.07	0.07	0.06	-	0.02	-
Export	496.64	511.28	453.33	376.06	608.04	797.19	710.70	631.40	455.62	500.46
Electricity	476.51	496.93	435.81	348.55	528.47	788.98	694.37	622.55	442.29	470.34
Diesel	11.60	6.08	3.76	5.64	7.68	0.52	11.91	2.88	4.26	18.30
Petrol	5.59	5.60	6.33	7.63	11.43	7.44	3.88	5.96	9.06	11.82
Coal	2.94	2.67	7.43	14.23	60.45	0.25	0.55	0.01	-	-
Import	236.81	236.44	261.12	350.49	337.13	213.34	224.44	253.47	332.91	458.44
Electricity	14.03	9.73	17.89	25.85	22.85	7.03	8.43	21.27	53.48	125.38
Diesel	109.12	113.96	125.66	140.12	133.94	90.10	98.60	94.80	137.40	172.10
Petrol	27.60	29.30	31.74	140.12	133.94	27.94	26.74	29.90	45.47	58.38
Kerosene	3.96	4.11	3.64	-	-	1.53	1.42	0.98	0.52	0.22
ATF	2.83	2.81	3.39	38.24	41.45	1.44	0.99	1.96	2.89	4.50
LPG	9.17	9.84	10.50	3.09	2.48	10.94	9.83	9.41	9.26	10.14
Coal	70.11	66.70	68.29	3.09	2.48	74.37	78.45	95.15	83.91	87.72
Total Supply	978.99	849.17	1,053.63	1,057.79	1,208.65	1,302.11	1,230.19	1,354.39	1,347.92	1,597.44

Table 37: Physical supply table for energy, 2024

Unit: As specified.	PRODUCTION		Accumulation	Flows from RoW	Flows from the Environment	Total Supply
	Industries	Households		Imports		
I. Energy from natural inputs						
Inputs of energy from renewable sources					11,656.87	11,656.87
(1) Hydro (GWh)					11,652.79	11,652.79
(2) Diesel(GWh)					0.7800	0.78
(3) Wind (GWh)					0.04	0.04
(4) Solar (GWh)					3.26	3.26
Natural resource inputs					230,173.37	230,173.37
(1) Coal (MT)					169,489.43	169,489.43
1.1) Bituminous / Sub-Bituminous						-
1.2) Anthracite						-
1.3) Coke/Semi-coke of coal					169,489.43	169,489.43
1.4) Other coal						-
(2) Fuelwood (MT)					60,683.94	60,683.94
(3) Briquettee (MT)						-
Total energy from natural inputs					241,830.24	173,494.05
II. Energy products						
Production of energy products by SIEC* class						
(1) Coal (MT)	169,489.43		158,495.26		327,984.69	
1.1) Bituminous / Sub-Bituminous			30,065		30,064.64	
1.2) Anthracite	-		2.23		2.23	
1.3) Coke/Semi-coke of coal	169,489.43		96,704		266,193.65	
1.4) Other coal			31,724.17		31,724.17	
(2) Diesel (KL)	-		192,614.59		192,614.59	
2.1) Diesel (HSD)	-		192,482.83		192,482.83	
2.2) Light Diesel Oil (LDO)	-		131.76		131.76	
(3) Petrol (KL)			71,657.05		71,657.05	
(4) Aviation Turbine Fuel (ATF) (KL)	-		5,292.00		5,292.00	
(5) Kerosene (KL)	-		252.01		252.01	
5.1) Kerosene (SK Oil)	-		252.01		252.01	
5.2) Kerosene (SK Oil-Industrial)	-				-	
(6) Furnace Oil (FO) (KL)	-		3,368.95		3,368.95	
(7) LPG (MT)	-		8,978.20		8,978.20	
(8) Electricity (GWh)	11,595.39		1,458.16		13,053.55	
(9) Biogas for cooking (MT)	-	-		-		
(10) Fuelwood (MT)	60,683.94	-		60,683.94		
(11) Briquette (MT)**	-	-		-		
Total use of energy products				683,884.97		
III. Energy residuals***						
Losses during extraction (GWh)	-	-			-	
Losses during distribution (GWh)		-			-	
Losses during transformation (GWh)	78.22	-			78.22	
Other energy residuals (GWh)	-	-			-	
Total energy from residuals						

Note: *Standard International Energy Classification, ***Energy losses relate to only hydro-electricity

Table 38: Physical use table for energy, 2024

Unit: As specified.	USE		Accumulation	Flows to RoW	Flows to the Environment	Total Use
	Industries	Households		Exports		
I. Energy from natural inputs						
Inputs of energy from renewable sources	11,656.87					11,656.87
(1) Hydro (GWh)	11,652.79					11,652.79
(2) Diesel (GWh)	0.78					0.78
(3) Wind (GWh)	0.04					0.04
(4) Solar (GWh)	3.26					3.26
Natural resource inputs	230,173.37					230,173.37
(1) Coal (MT)	169,489.43					169,489.43
1.1) Bituminous / Sub-Bituminous	-					-
1.2) Anthracite	-					-
1.3) Coke/Semi-coke of coal	169,489.43					169,489.43
1.4) Other coal	-					-
(2) Fuelwood (MT)	60,683.94					60,683.94
(3) Briquettee (MT)	-	-				
Total energy from natural inputs	241,830.24					
II. Energy products						
Production of energy products by ISIC* class						
(1) Coal (MT)	327,984.69	-		-		327,984.69
1.1) Bituminous / Sub-Bituminous	30,064.64					30,064.64
1.2) Anthracite	2.23	-		-		2.23
1.3) Coke/Semi-coke of coal	266,193.65	-				266,193.65
1.4) Other coal	31,724.17	-	-			31,724.17
(2) Diesel (KL)**	164,683.65	7,445.86	-	20,485.07		192,614.59
2.1) Diesel	164,551.89	7,445.86	-	20,485.07		192,482.83
2.2) Light Diesel Oil (LDO)	131.76	-	-	-		131.76
(3) Petrol (KL)***	2,561.34	54,583.67	-	14,512.03		71,657.05
(4) Aviation Turbine Fuel (ATF)	5,292.00	-	-	-		5,292.00
(5) Kerosene (KL)	-		-	-		252.01
5.1) Kerosene (SK Oil)	-	252.01	-	-		252.01
5.2) Kerosene (SK Oil-Industrial)	-	-	-	-		-
(6) Furnace Oil (FO) (KL)	3,368.95	-	-	-		3,368.95
(7) LPG (MT)	591.54	8,386.66	-	-		8,978.20
(8) Electricity (GWh)	7,117.69	465.83		5,470.03		13,053.55
(9) Biogas for cooking (MT)			-			-
(10) Fuelwood (MT)	28,513.37	32,170.57			60,683.94	
(10) Briquette (MT)		-	-	-	-	
Total use of energy products					683,884.97	
III. Energy residuals						
Losses during extraction (GWh)					-	-
Losses during distribution (GWh)					-	-
Losses during transformation (GWh)					78.22	78.22
Other energy residuals (GWh)					-	-
Total energy from residuals						683,963.19

Note: *Standard International Energy Classification, ***Energy losses relate to only hydro-electricity

Table 39: Physical Supply table for energy, 2024

Unit: KToE	PRODUCTION		Accumulation	Flows from RoW	Flows from the environment	Total Supply
	Industries	Households		Imports		
I. Energy from natural inputs						
Inputs of energy from renewable sources					1,002.24	1,002.24
(1) Hydro					1,001.96	1,001.96
(2) Solar					0.28	0.28
(3) Wind					0.00	0.00
Natural resource inputs					136.76	136.76
(1) Coal					114.15	114.15
1.1) Bituminous / Sub-Bituminous					-	-
1.2) Anthracite					-	-
1.3) Coke/Semi-coke of coal					114.15	114.15
1.4) Other coal					-	-
(2) Fuelwood					22.61	22.61
(3) Briquettee	-	-				
Total energy from natural inputs					1,139.01	1,139.01
II. Energy products						
Production of energy products by SIEC* class						
(1) Coal	114.15		87.72		201.87	
1.1) Bituminous / Sub-Bituminous	-		13.57		13.57	
1.2) Anthracite	-		0.00		0.00	
1.3) Coke/Semi-coke of coal	114.15		65.13		179.28	
1.4) Other coal	-		9.02		9.02	
(2) Diesel	-		172.10		172.10	
2.1) Diesel	-		171.98		171.98	
2.2) Light Diesel Oil (LDO)	-		0.12		0.12	
(3) Petrol	-		58.38		58.38	
(4) Aviation Turbine Fuel (ATF)	-		4.50		4.50	
(5) Kerosene	-		0.22		0.22	
5.1) Kerosene (SK Oil)	-		0.22		0.22	
5.2) Kerosene (SK Oil-Industrial)	-		-		-	
(6) Furnace Oil (FO)	-		2.87		2.87	
(7) LPG	-		10.14		10.14	
(8) Electricity	997.02		125.38		1,122.40	
(9) Biogas for cooking	-		-		-	
(10) Fuelwood	22.61		-		22.61	
(11) Briquette**	-		-		-	
Total energy products	1,133.79	461.30		1,595.09		
III. Energy residuals***						
Losses during extraction	-	-				-
Losses during distribution	-	-				-
Losses during transformation	6.73	-				6.73
Other energy residuals	-	-				-
Total energy residuals***	6.73	-				6.73
TOTAL SUPPLY	1,140.51	-	-	461.30	-	1,601.81

Table 40: Physical Use table for energy, 2024

Unit: KToE			Accumulation	Flows to RoW	Flows to the environment	Total Use
	Industries	Households		Exports		
I. Energy from natural inputs						
Inputs of energy from renewable sources	1,002.24					1,002.24
(1) Hydro	1,001.96					1,001.96
(2) Solar	0.28					0.28
(3) Wind	0.00					0.00
Natural resource inputs	136.76					136.76
(1) Coal	114.15					114.15
1.1) Bituminous / Sub-Bituminous	-					-
1.2) Anthracite	-					-
1.3) Coke/Semi-coke of coal	114.15					114.15
1.4) Other coal	-					-
(2) Fuelwood	22.61					22.61
(3) Briquettee	-					-
Total energy from natural inputs	1,139.01					1,139.01
II. Energy products						
Production of energy products by SIEC* class						
(1) Coal	201.87	-		-		201.87
1.1) Bituminous / Sub-Bituminous	13.57	-		-		13.57
1.2) Anthracite	0.00	-		-		0.00
1.3) Coke/Semi-coke of coal	179.28	-		-		179.28
1.4) Other coal	9.02	-		-		9.02
(2) Diesel	147.14	6.65	-	18.30		172.10
2.1) Diesel	147.03	6.65	-	18.30		171.98
2.2) Light Diesel Oil (LDO)	0.12	-	-	-		0.12
(3) Petrol	2.09	44.47	-	11.82		58.38
(4) Aviation Turbine Fuel (ATF)	4.50	-	-	-		4.50
(5) Kerosene	-	0.22	-	-		0.22
5.1) Kerosene (SK Oil)	-	0.22	-	-		0.22
5.2) Kerosene (SK Oil-Industrial)	-	-	-	-		-
(6) Furnace Oil (FO)	2.87	-	-	-		2.87
(7) LPG	0.67	9.47	-	-		10.14
(8) Electricity	612.01	40.05	-	470.34		1,122.40
(9) Biogas for cooking	-	-	-	-	-	
(10) Fuelwood	10.62	11.99	-	-	22.61	
(11) Briquette	-	-	-	-	-	
Total use of energy products	971.15	112.85	-	500.46	1,595.09	
III. Energy residuals						
Losses during extraction					-	-
Losses during distribution					-	-
Losses during transformation					6.73	6.73
Other energy residuals					-	-
Total energy residuals					-	6.73
TOTAL USE	971.15	112.85	-	500.46	-	1,601.81

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