

2.1. Electricity Generation_

Ethiopia is endowed with enormous potential for hydroelectric power and geothermal energy generation. Among its major rivers, nine are suitable for hydroelectric power generation with a total capacity of 15,000-30,000 MW. The geothermal potential is said to be so huge that if adequate finance becomes available to develop the sector, it could even be exported to neighboring countries. Despite such facts, the country so far managed to utilize a mere 668.7MW of its power generating potential and, hence, only about 16 percent of the population has access to electricity.

The Ethiopian Electric Power Corporation (EEPCo), being a public enterprise mandated to generate, transmit, distribute, and sale electricity, generates electricity through two different power supply systems, the Interconnected System (ICS) and the Self Contained System (SCS). The ICS, which is largely generated by hydropower plants, is the major source of electric power generation. On the other hand, the power generated by SCS system has become increasingly less and less. In fact, SCS's share from the total electric power production went down to an average of 2.0 percent during 2000/01-2004/05 from an average of 3 percent during 1995/96-1999/00. The ICS is advantageous compared to the SCS due to the fact that in the case of the latter there is no chance to use power from the other proximity plant when power fails.

In 2004/05, a total amount of 2.58MW electricity was generated, which was 11.6 percent higher than that of the previous year. The electricity generated by the ICS and SCS were 11.2 and 42.2 percent higher as compared to the previous year (See Table II.1).

Looked from power source perspective, 2.52MW and 54 KW electric power was generated by hydro-power and thermal power plants, respectively, showing 11.1 and 42.6 percent increases over last year.

Currently, there are six power plants under construction. Out of these plants, five of them are hydro-power plants and the other one is coal plant. Up on completion, these plants are expected to generate 1.81GW of electric power.

Table II . 1: Generation of Electric Power in the Inter-Connected System (ICS) and Self-Contained

System (SCS)

Source		2002/2003	2003/2004	2004/2005	Percentage Change	
		[A]	[B]	[C]	[C/A]	[C/B]
ICS	Hydro Power	2,007,094.7	2,262,503.6	2,514,693.1	25.3	11.1
	Thermal Power	21,435.8	16,043.3	18,216.5	-15.0	13.5
Sub Total		2,028,530.5	2,278,546.9	2,532,909.6	24.9	11.2
SCS	Hydro Power	-	10,308.7	9,987.7		-3.1
	Thermal Power	19,140.9	22,243.1	36,377.9	90.1	63.5
Sub Total		19,140.9	32,551.8	46,365.5	142.2	42.4
Total	Hydro Power	2,007,094.7	2,272,812.3	2,524,681.0	25.8	11.1
	Thermal Power	40,576.7	38,286.4	54,594.4	34.5	42.6
Grand Total		2,047,671.4	2,311,098.7	2,579,275.2	26.0	11.6

Source : Ethiopian Electric Power Corporation (EEPCo)

2.2 Volumes and Value of Petroleum Imports

During fiscal year 2004/05, a total of 1.37 million metric tons of petroleum products worth of Birr 4.97 billion (about USD 574 million) were imported by the Ethiopian Petroleum Enterprise. This was 67.9 percent higher than that of the preceding fiscal year on account of the 12.2 percent increase in the volume of import fueled by persistent rise of international oil prices. As Ethiopia is a net importer of fuel, the escalating oil price in the international market has cost the country more foreign exchange (about USD 192 million) than anticipated and it has fed and to feed into inflationary pressure by way of a pass-through effect. This trend is expected to continue for some time.

Component wise, the values of imports of Jet fuel, surged by 82.4 percent, Gas oil by 70.6 percent, Regular gasoline by 47.7 percent, and Fuel oil by 31.8 percent.

In line with the rising oil prices in the world market, domestic prices of petroleum products have also been periodically adjusted upwards, every quarter. Since third quarter 2004/05 of, however, the retail price was not adjusted to minimize the adverse economic impacts of the world oil prices of petroleum products hike through the fuel price stabilization program of the government. In Addis Ababa, the retail price of Regular gas oil in the fourth quarter of 2004/05 increased to Birr 5.5/litre or 17 percent) from Birr 4.7/Litre a year earlier. A similar average retail price increased (about 39-43 percent) was also recorded for the rest of petroleum products (See Table II.3).

Table II . 2: Volume and Value of Petroleum Imports

(Volume in metric ton and value in thousand Birr)

Products	2003/04		2004/05		Percentage Change	
	Volume	Value	Volume	Value	[C/A]	[D/B]
	[A]	[B]	[C]	[D]		
<i>Regular Gasoline (MGR)</i>	122,756.0	351,740.0	133,193	519,684	8.5	47.7
<i>Jet Fuel</i>	283,140.0	747,716.0	332,978	1,363,931	17.6	82.4
<i>Fuel Oil</i>	141,177.0	225,993.0	161,254	297,854	14.2	31.8
<i>Liquefied Petroleum Gas (LPG)</i>	0	0	0	0		
<i>Gas Oil (ADO)</i>	678,178.0	1,632,613.0	746,899	2,784,699	10.1	70.6
Total	1,225,251.0	2,958,062.0	1,374,325	4,966,168	12.2	67.9

Source: Ethiopian Petroleum Enterprise (EPE)

Fig.2.2 Trends in Volume of performance of Petroleum Imports

Table II.3: Addis Ababa Quarterly Retail Price of Petroleum Product

Fiscal Year	Quarter	Types of Petroleum Product			
		MGR	Fuel Oil	Gas Oil	Kerosene
20001/02	Qtr.1	4.3	2.2	2.6	2.0
	Qtr.2	4.3	2.2	2.6	2.0
	Qtr.3	4.3	2.2	2.6	2.0
	Qtr.4	4.3	2.2	2.6	2.0
	Average	4.3	2.2	2.6	2.0
2002/03	Qtr.1	4.4	2.2	2.7	2.0
	Qtr.2	4.4	2.2	2.7	2.0
	Qtr.3	4.4	2.2	2.7	2.0
	Qtr.4	4.4	2.3	2.7	2.0
	Average	4.4	2.2	2.7	2.0
2003/04	Qtr.1	4.4	2.3	2.7	2.0
	Qtr.2	4.4	2.3	2.7	2.0

	Qtr.3	4.4	2.2	2.7	2.0
	Qtr.4	4.7	2.5	3	2.2
	Average	4.5	2.3	2.8	2.0
2004/05	Qtr.1	5.0	2.9	3.4	2.5
	Qtr.2	5.3	3.2	3.9	2.8
	Qtr.3	5.5	3.4	4.3	3.0
	Qtr.4	5.5	3.4	4.3	3.0
	Average	5.3	3.2	4.0	2.8