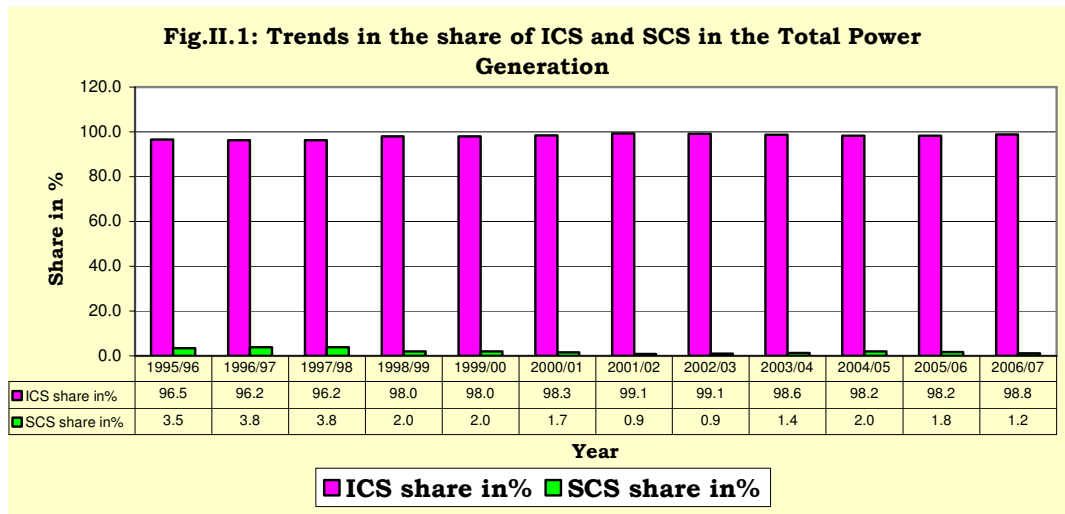


## II. ENERGY PRODUCTION

### 2.1 Electricity Generation

There is immense potential for hydroelectric power and geothermal energy generation in Ethiopia. Nine of its major rivers are suitable for hydroelectric power generation with a total capacity of 15,000-30,000 MW. Similarly, geothermal energy generation potential of the country is also immense. Despite such huge resources, however, the country so far has managed to utilize a mere 790 MW of its power generating potential and, hence, only about 17 percent of the population has access to electricity.

The Ethiopian Electric Power Corporation (EEPCo), a public enterprise, is mandated to generate, transmit, distribute, and sell electricity. The corporation 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 from SCS system has become increasingly less with its share in total electric power production dropping to 1.2 percent in 2006/07 from an average of 3 percent during 1995/96-1999/00.



The total electricity generated during 2006/07 was 3,310,4 million KWH,

which was 14.3 percent higher than the preceding year. Out of the total, 98.6

percent of the electricity was generated through hydropower while the rest (1.4 percent) came from thermal power (Table II.1).

As per the government's five year Plan for Accelerated and Sustained Development to End Poverty (PASDEP), it is envisaged to increase electricity generation capacity of the country by completing the power projects currently under construction and building new ones and increasing

the distribution to rural towns and *Kebeles*. By 2010, when the power generation projects such as Tekeze (300 MW), Gilgel Gibe 2nd (420 MW), Amertenesh (97 MW), Wind Power (50 MWH) and Yayo (100 MW) are completed, the country's power generation capacity is expected to reach 2218 MW per hour. The number of electrified cities and towns is also planned to reach 6000 from the current level of 1166

**Table 2.1. Generation of Electric Power in the Inter-Connected System (ICS) and Self-Contained System (SCS)**

(In,000 KWH)

Source	2004/2005	2005/2006	2006/2007	Percentage Change	
	[A]	[B]	[C]	[C/A]	[C/B]
<b>ICS Hydro Power</b>	2,514,693	2,838,714	3,259,789	29.6	14.8
<b>Thermal Power</b>	18,217	6,307	9,713	-46.7	54.0
<b>Sub Total</b>	2,532,910	2,845,021	3,269,502	29.1	14.9
<b>SCS Hydro Power</b>	9,988	18,663	5,238	-47.6	-71.9
<b>Thermal Power</b>	36,378	32,839	35,653	-2.0	8.6
<b>Sub Total</b>	46,366	51,502	40,891	-11.8	-20.6
<b>Total Hydro Power</b>	2,524,681	2,857,378	3,265,027	29.3	14.3
<b>Thermal Power</b>	54,594	39,147	45,366	-16.9	15.9
<b>Grand Total</b>	<b>2,579,275.20</b>	<b>2,896,524.60</b>	<b>3,310,394</b>	28.3	14.3

Source: Ethiopian Electric Power Corporation (EEPCO)

## 2.2 Volumes and Value of Petroleum Imports

In 2006/07, a total of 1, 608.4 million metric tones of petroleum products worth Birr 7,873.6 million (about USD 871.8) million ) were imported by the Ethiopian Petroleum Enterprise. The value was 18.1 percent higher than that

of the preceding fiscal year on account of the continuous rise in international oil prices and increased fuel demand owing to the growing domestic economy. As Ethiopia is net importer of fuel, the escalating oil price in the international market has contributed to

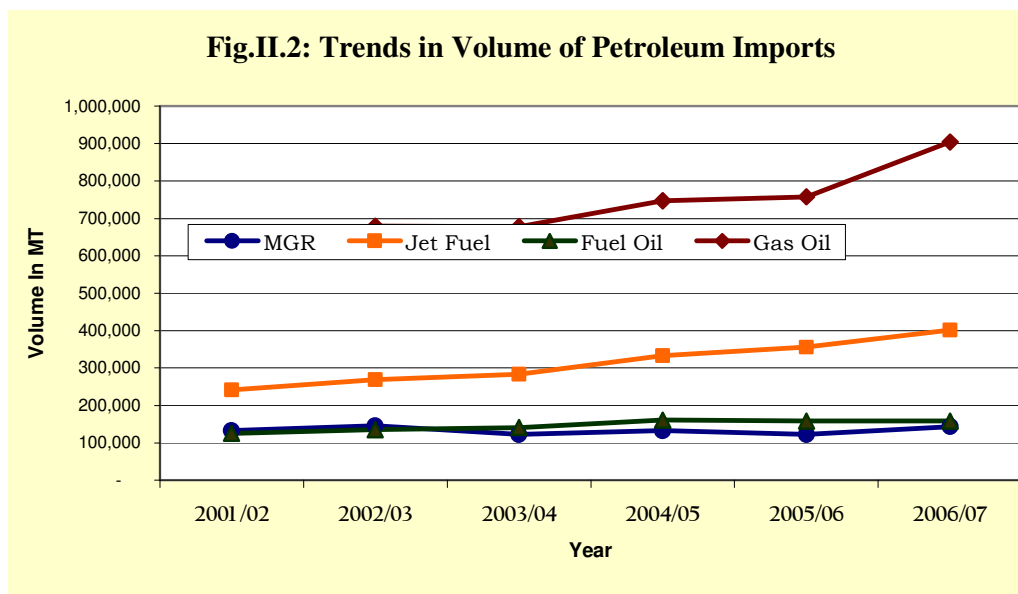
a widening trade deficit and inflationary pressure by way of a pass-through effect.

Component wise, the values of imports of Regular gasoline declined by 11.6 percent, while that of Jet fuel, Fuel oil and Gas oil surged by 13.2, 16.6, and 27.9 percent, respectively

**Table 2.2: Volume and Value of Petroleum Imports**

(Volume in metric ton and value in thousand Birr)

Products	2005/06		2006/07		Percentage Change	
	Volume	Value	Volume	Value	[C/A]	[D/B]
	[A]	[B]	[C]	[D]		
<i>Regular Gasoline (MGR)</i>	122,502.8	83,7674	143,664	740,426.2	17.3	-11.6
<i>Jet Fuel</i>	355,650.4	1,914,852	401,492	2,168,104.6	12.9	13.2
<i>Fuel Oil</i>	158,227.4	395,449	158,843	461,230.4	0.4	16.6
<i>Gas Oil (ADO)</i>	757,644.4	3,520,364.8	904,378	450,3816.2	19.4	27.9
<b>Total</b>	<b>1,394,024.8</b>	<b>6,668,339.8</b>	<b>1,608,377.0</b>	<b>7,873,577.5</b>	<b>15.4</b>	<b>18.1</b>



Generally, domestic retail prices of petroleum products are adjusted quarterly in line with the movements of oil prices in the world market. The retail prices of Kerosene, and Gas oil were held constant, while that of MGR and fuel oil were

adjusted downward in the third quarter of 2006/07. Yet, the average prices of all petroleum products tended to increase over the preceding fiscal year.

**Table 2.3: Addis Ababa Quarterly Retail Price of Petroleum Products (Birr/liter)**

		MGR	Fuel Oil	Gas Oil	Kerosene
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	4.50	2.30	2.80	2.00
2004/05	Qtr.1	5.0	2.89	3.4	2.5
	Qtr.2	5.3	3.21	3.9	2.8
	Qtr.3	5.5	3.43	4.3	3.0
	Qtr.4	5.5	3.43	4.3	3.0
	Average	5.31	3.24	3.98	2.83
2005/06	Qtr.1	5.5	3.4	4.3	3.0
	Qtr.2	5.5	3.4	4.3	3.0
	Qtr.3	5.5	3.4	4.3	3.0
	Qtr.4	6.2	3.9	4.6	3.3
	Average	5.68	3.53	4.38	3.08
2006/07	Qtr.1	7.6	4.2	5.2	3.9
	Qtr.2	8.0	5.6	5.4	4.1
	Qtr.3	7.7	5.2	5.4	4.1
	Qtr.4	7.7	5.2	5.4	4.1
	Average	7.8	5.0	5.4	4.1

Source: Ethiopian Petroleum Enterprise.