

## II. ENERGY PRODUCTION AND PROCESSING

### 2.1 Imported Petroleum Products

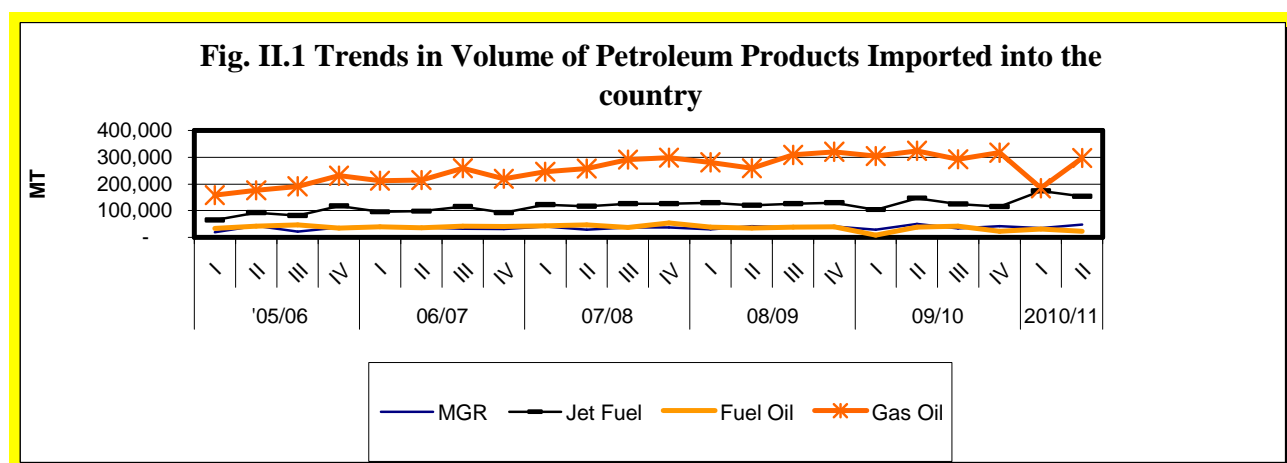
According to the data obtained from the Ethiopian Petroleum Enterprise (EPE), 523,085.5 metric tones of petroleum products were imported into the country during the second quarter of 2010/11. This Volume was 6.4 percent lower than the same period of last fiscal year but

23.5 percent higher than the previous quarter. Increased imports of Gas Oil and Regular Gasoline were behind the observed quarterly growth in volume of imports of petroleum products (Table 2.1).

**Table 2.1: Volume of Petroleum Products Imported** (In Metric Ton)

|                        | 2009/10        |              | 2010/11          |              |                  |              | Percentage Change |             |
|------------------------|----------------|--------------|------------------|--------------|------------------|--------------|-------------------|-------------|
|                        | Qtr II         |              | Qtr I            |              | Qtr II           |              | C/A               | C/B         |
|                        | A              | Share In %   | B                | Share In %   | C                | Share In %   |                   |             |
| Regular Gasoline (MGR) | 50,128         | 9.0          | 34,775.1         | 8.2          | 48,048.3         | 9.2          | -4.1              | 38.2        |
| Jet Fuel               | 146,894        | 26.3         | 173,261.4        | 40.9         | 153,993.7        | 29.4         | 4.8               | -11.1       |
| Fuel Oil               | 38,232         | 6.8          | 31,202.1         | 7.4          | 23,734.3         | 4.5          | -37.9             | -23.9       |
| Gas Oil (ADO)          | 323,862        | 57.9         | 184,166.3        | 43.5         | 297,309.2        | 56.8         | -8.2              | 61.4        |
| <b>Total</b>           | <b>559,117</b> | <b>100.0</b> | <b>423,404.9</b> | <b>100.0</b> | <b>523,085.5</b> | <b>100.0</b> | <b>-6.4</b>       | <b>23.5</b> |

Source: Ethiopian Petroleum Enterprise (EPE)



Source: EPE

The total value of petroleum products imported into the country during the second quarter of 2010/11 was Birr 6.3 billion, about 40 percent higher than the same quarter of last fiscal year (Table 2.2).

**Table 2.2 Value of Petroleum Products Imported***(In '000 Birr)*

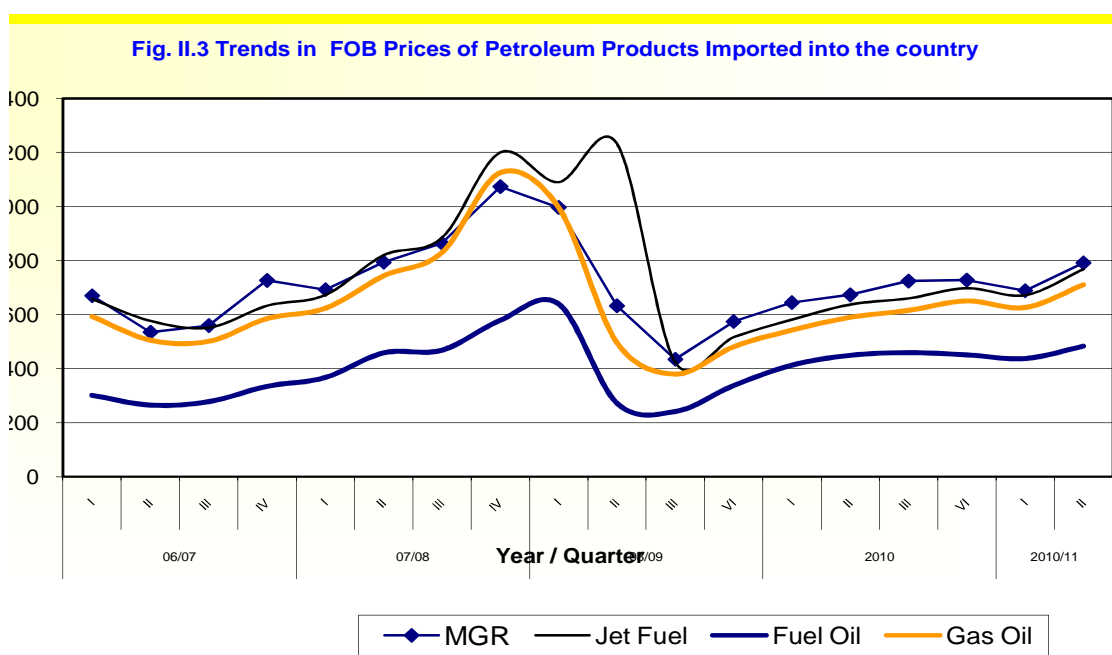
|                        | 2009/10     |            | 2010/11     |            |             |            | Percentage Change |       |
|------------------------|-------------|------------|-------------|------------|-------------|------------|-------------------|-------|
|                        | Qtr II      |            | Qtr I       | Qtr II     |             |            |                   |       |
|                        | A           | Share In % | B           | Share In % | C           | Share In % | C/A               | C/B   |
| Regular Gasoline (MGR) | 422,094.4   | 9.3        | 333,701.0   | 8.3        | 468,152.9   | 7.4        | 10.9              | 40.3  |
| Jet Fuel               | 1,300,291.7 | 28.7       | 939,551.4   | 23.4       | 2,077,987.0 | 32.7       | 59.8              | 121.2 |
| Fuel Oil               | 246,419.6   | 5.4        | 229,607.3   | 5.7        | 162,713.8   | 2.6        | -34.0             | -29.1 |
| Gas Oil (ADO)          | 2,566,753.2 | 56.6       | 2,517,844.5 | 62.6       | 3,640,227.4 | 57.3       | 41.8              | 44.6  |
| Total                  | 4,535,558.9 | 100        | 4,020,704.3 | 100.0      | 6,349,081.1 | 100.0      | 40.0              | 57.9  |

Source: EPE

The yearly rise, in the value of petroleum products, was due to higher volume and price of jet fuel import, peak up in the prices of gasoil and MGR and significant depreciation of the Birr in September 2010.

The FOB price of petroleum products on average tended to increase both on quarterly and annual basis. It went up by

13.6 percent relative to the preceding quarter and 17.2 percent against a year ago and reached USD 687.8 per metric ton. The hike in the prices of all petroleum products contributed to the quarterly and annual increase in FOB prices. (Table 2.3).



Source: EPE

**Table 2.3: FOB Price of Petroleum Products Imported into the Country**

(In USD/MT)

| Petroleum Products     | 2009/10      | 2010/11       |               | Percentage Change |             |
|------------------------|--------------|---------------|---------------|-------------------|-------------|
|                        | Qtr II       | Qtr I         | Qtr II        | C/A               | C/B         |
|                        | A            | B             | C             |                   |             |
| Regular Gasoline (MGR) | 672.8        | 688.10        | 791.04        | 17.6              | 15.0        |
| Jet Fuel               | 636.7        | 671.4         | 767.4         | 20.5              | 14.3        |
| Fuel Oil               | 448.9        | 437.2         | 482.6         | 7.5               | 10.4        |
| Gas Oil (ADO)          | 589.1        | 625.5         | 710.0         | 20.5              | 13.5        |
| <b>Average</b>         | <b>586.9</b> | <b>605.54</b> | <b>687.76</b> | <b>17.2</b>       | <b>13.6</b> |

Source: EPE

International crude oil price on average reached USD 87 per barrel in the review quarter from USD 74.5 and USD 74.6 per barrel in previous quarter and the

same quarter of last fiscal year, respectively. The increase in the price of petroleum products in the world market was attributed to strong demand from

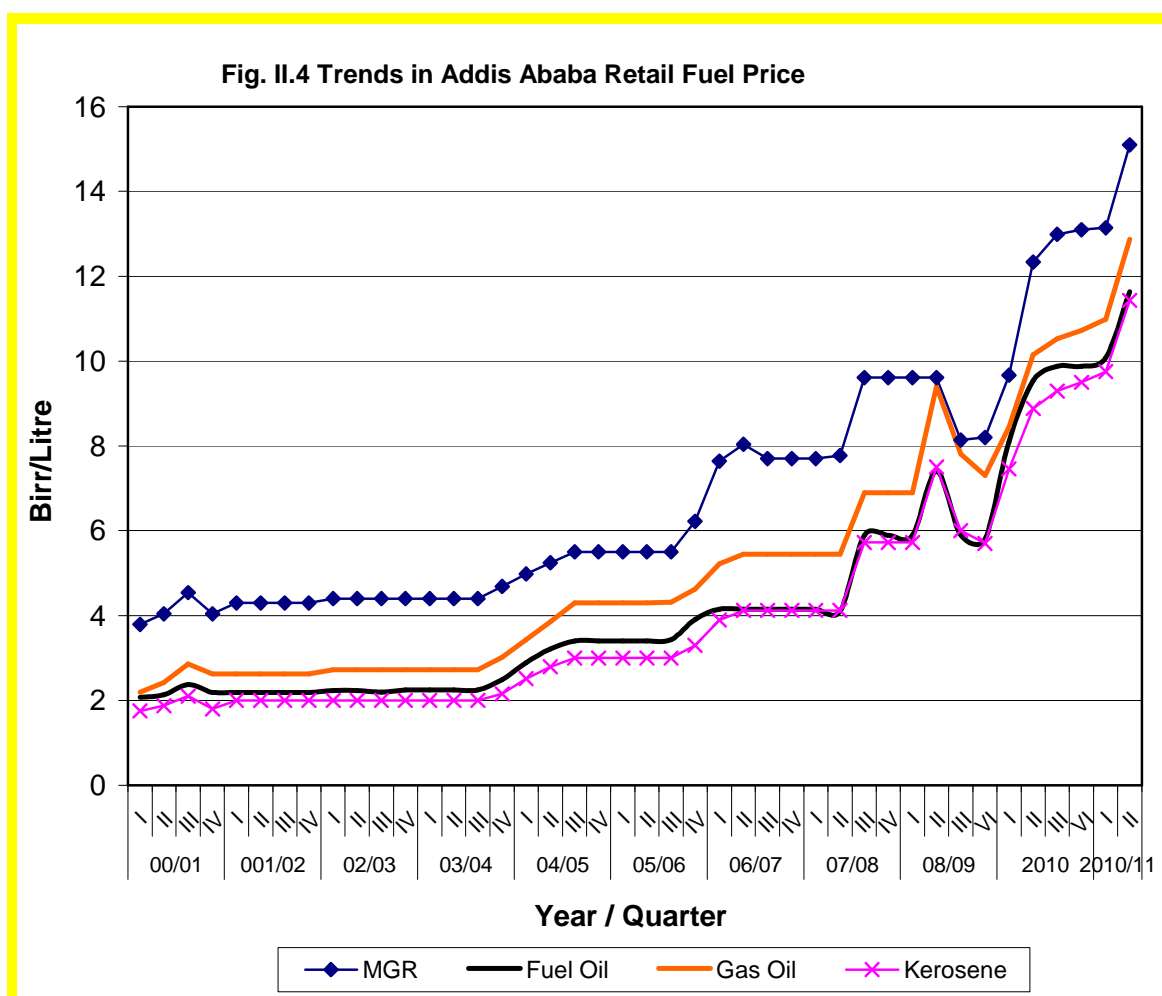
Asia, particularly from China in addition to the drop in supply as a result of instability in the Middle East and North Africa.

Following the trend in the international market, domestic retail prices of petroleum products were also adjusted upwards. On average, domestic retail prices of petroleum products in Addis Ababa went up by 16.4 percent on quarterly and 25.4 percent on yearly basis. Component wise, domestic retail prices of all imported petroleum products, have gone up ranging from 14.9 percent (regular gasoline) to 17.4 percent (jet fuel) relative to the preceding quarter. The yearly range was 22.1 percent (fuel oil) and 28.7 percent (kerosene). (Table2.4)

**Table 2.4: Retail Prices of Fuel in Addis Ababa***(Birr/Liter)*

| Petroleum Products     | 2009/10 | 2010/11 |        | Percentage Change |      |
|------------------------|---------|---------|--------|-------------------|------|
|                        | Qtr II  | Qtr I   | Qtr II | C/A               | C/B  |
|                        | A       | B       | C      |                   |      |
| Regular Gasoline (MGR) | 12.3    | 13.1    | 15.1   | 22.4              | 14.9 |
| Fuel Oil               | 9.5     | 10.1    | 11.6   | 22.1              | 15.5 |
| Gas Oil (ADO)          | 10.1    | 11.0    | 12.9   | 26.9              | 17.2 |
| Kerosene               | 8.9     | 9.7     | 11.4   | 28.7              | 17.3 |
| Jet fuel               | 11.5    | 12.6    | 14.7   | 27.7              | 17.4 |
| Average                | 10.5    | 11.3    | 13.2   | 25.4              | 16.4 |

Source: EPE



Source: EPE

## 2.2 Electric Power Generation

The total electricity generated during the review period was 1.2 billion KWH, about 20.4 percent higher compared to the same quarter of last fiscal year (Table 2.5).

The growth in electricity generation was exclusively attributed to 29.1 percent rise in hydropower, which constituted 99.1 percent of the total power supply in the review period. Only 0.8 percent was produced from thermal and geothermal sources.

Looking from the perspective of system category, 99.5 percent of electricity generation was from interconnected system and 0.5 percent from self contained system.

As per government's five-year Growth and Transformation Plan (GTP), electricity generation capacity of the country is planned to be bolstered by completing the power stations under construction and building new ones with greater capacity. Accordingly, the country's electricity generation capacity is projected to increase

to 8,000 MW by 2015 from 2,000 MW in 2010. This will enhance the coverage and access to electricity to 75 percent of the population from 41 percent in 2010.

Table 2.5: Electric Power Generation

(In '000KWH)

| Power Source  | 2009/10          |            | 2010/11            |            |                    |            | Percentage Change |            |
|---------------|------------------|------------|--------------------|------------|--------------------|------------|-------------------|------------|
|               | Qtr II           | Share      | Qtr I              | Share      | Qtr II             | Share      | C/A               | C/B        |
|               | A                | In %       | B                  | In %       | C                  | In %       |                   |            |
| Hydropower    | 918,473.1        | 92.4       | 1,161,296.0        | 98.1       | 1,185,821.3        | 99.1       | 29.1              | 2.1        |
| Thermal Power | 69,503.0         | 7.0        | 17,490.9           | 1.5        | 5,352.8            | 0.4        | -92.3             | -69.4      |
| Geothermal    | 5,854.7          | 0.6        | 5,486.3            | 0.5        | 5,090.6            | 0.4        | -13.1             | -7.2       |
| <b>Total</b>  | <b>993,830.8</b> | <b>100</b> | <b>1,184,273.2</b> | <b>100</b> | <b>1,196,264.7</b> | <b>100</b> | <b>20.4</b>       | <b>1.0</b> |

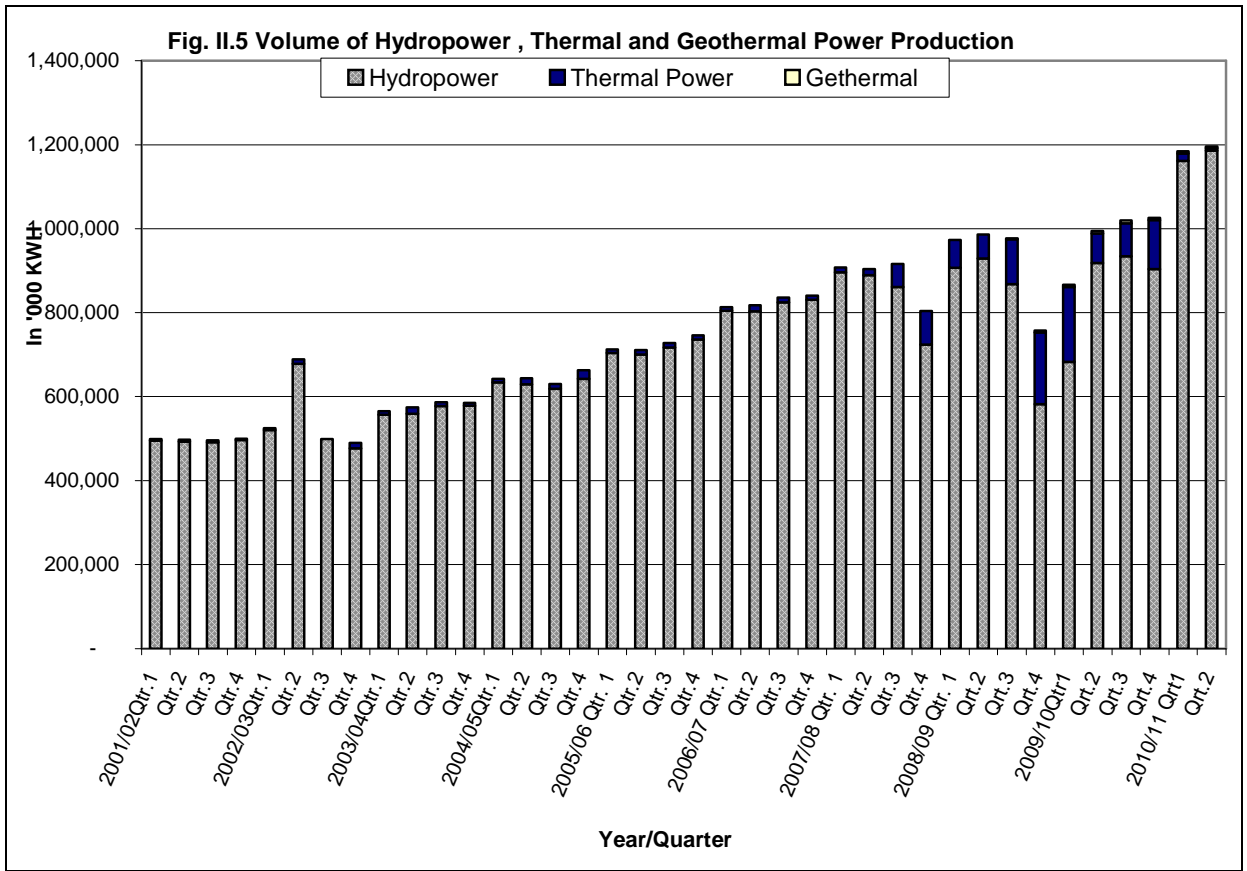
Source: EPE

Table 2.6: Electric Power Generation from ICS and SCS

(In'000KWH)

| System of Power Supply | 2009/10          |             |                    | 2010/11     |                    |             | Percentage Change |              |
|------------------------|------------------|-------------|--------------------|-------------|--------------------|-------------|-------------------|--------------|
|                        | Qtr II           | Share       | Qtr I              | Share       | Qtr II             | Share       | C/A               | C/B          |
|                        | A                | In %        | B                  | In %        | C                  | In %        |                   |              |
| <b>ICS</b>             |                  |             |                    |             |                    |             |                   |              |
| Hydro Power            | 912,523.8        | 91.8        | 1,154,660.2        | 97.5        | 1,183,707.4        | 99.0        | 29.7              | 2.5          |
| Thermal Power          | 63,269.3         | 6.4         | 12,127.3           | 1.0         | 1,321.2            | 0.1         | -97.9             | -89.1        |
| Geothermal             | 5,854.7          | 0.6         | 5,486.3            | 0.5         | 5,090.6            | 0.4         | -13.1             | -7.2         |
| <b>Sub-Total</b>       | <b>981,647.8</b> | <b>98.8</b> | <b>1,172,273.8</b> | <b>99.0</b> | <b>1,190,119.3</b> | <b>99.5</b> | <b>21.2</b>       | <b>1.5</b>   |
| <b>SCS</b>             |                  |             |                    |             |                    |             |                   |              |
| Hydro Power            | 5949.36          | 0.60        | 6,635.7            | 0.6         | 2,113.9            | 0.2         | -64.5             | -68.1        |
| Thermal Power          | 6,233.7          | 0.6         | 5,363.6            | 0.5         | 4,031.5            | 0.3         | -35.3             | -24.8        |
| Geothermal             | 0                | 0           | -                  |             |                    |             |                   |              |
| <b>Sub-Total</b>       | <b>12,183.0</b>  | <b>1.2</b>  | <b>11,999.4</b>    | <b>1.0</b>  | <b>6,145.4</b>     | <b>0.5</b>  | <b>-49.6</b>      | <b>-48.8</b> |
| <b>Grand Total</b>     | <b>993,830.8</b> | <b>100</b>  | <b>1,184,273.2</b> | <b>100</b>  | <b>1,196,264.7</b> | <b>100</b>  | <b>20.4</b>       | <b>1.0</b>   |

Source: EPE



Source: EEP Co