

## II. ENERGY PRODUCTION AND PROCESSING

### 2.1. Imported Petroleum Products

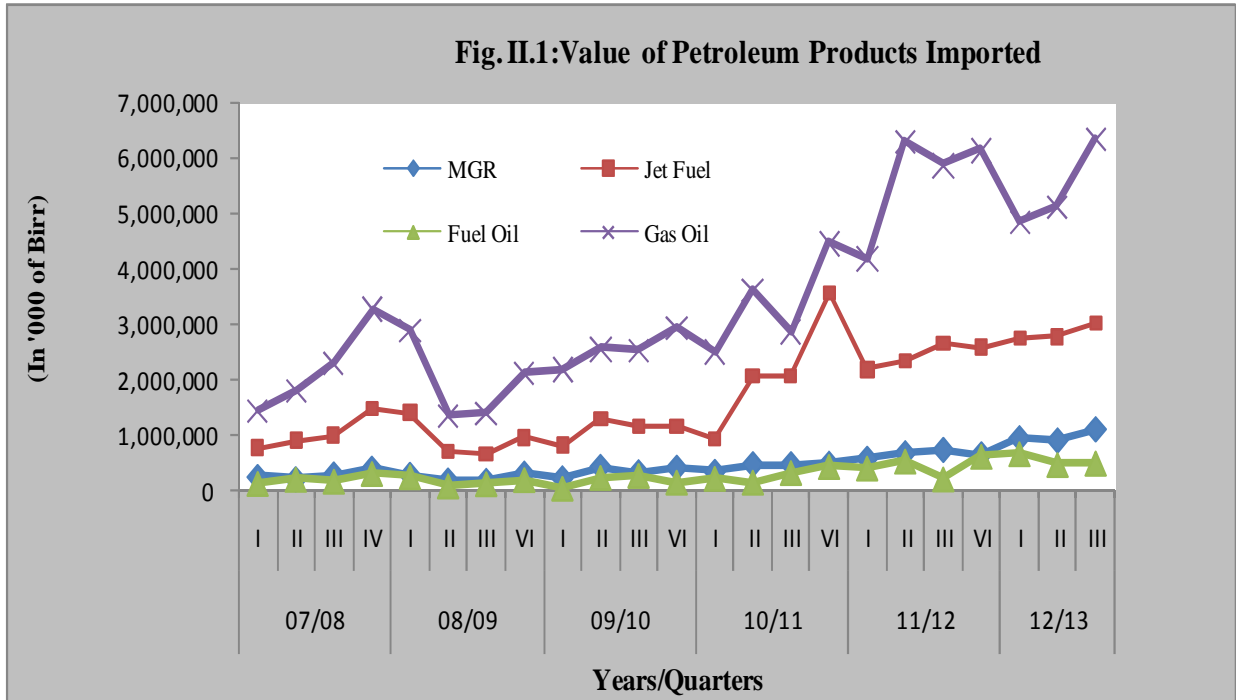
Total import bills of petroleum products during the third quarter of 2012/13 increased by 15.5 percent on yearly basis to Birr 11 billion as a result of higher import bill of gas oil (8 percent), regular gasoline (51 percent), Jet fuel (13.2 percent) and fuel oil (130.2 percent).

The quarterly import values of petroleum products also rose by 18.2 percent due to higher price of Jet fuel (8.5 percent), gas oil (24 percent), regular gasoline (22.4 percent) and fuel oil (5.3 percent). Gas oil alone constituted 58 percent of the total import value of petroleum products during the review period.

**Table 2.1: Value of Petroleum Products Imported** (In '000 Birr)

| Petroleum Products     | 2011/12            |              | 2012/13            |              |                     |              | Percentage Change |             |
|------------------------|--------------------|--------------|--------------------|--------------|---------------------|--------------|-------------------|-------------|
|                        | Qtr III            |              | Qtr II             |              | Qtr III             |              |                   |             |
|                        | A                  | Share (In %) | B                  | Share (In %) | C                   | Share (In %) | C/A               | C/B         |
| Regular Gasoline (MGR) | 724,016.7          | 7.6          | 893,767.2          | 9.6          | 1,093,611.0         | 10.0         | 51.0              | 22.4        |
| Jet Fuel               | 2,663,382.2        | 28.1         | 2,779,340.8        | 30.0         | 3,014,286.5         | 27.5         | 13.2              | 8.5         |
| Fuel Oil               | 219,613.7          | 2.3          | 480,114.1          | 5.2          | 505,467.5           | 4.6          | 130.2             | 5.3         |
| Gas Oil (ADO)          | 5,880,673.1        | 62.0         | 5,121,286.4        | 55.2         | 6,349,103.8         | 57.9         | 8.0               | 24.0        |
| <b>Total</b>           | <b>9,487,685.6</b> | <b>100.0</b> | <b>9,274,508.5</b> | <b>100.0</b> | <b>10,962,468.8</b> | <b>100.0</b> | <b>15.5</b>       | <b>18.2</b> |

**Source:** Ethiopian Petroleum Enterprise



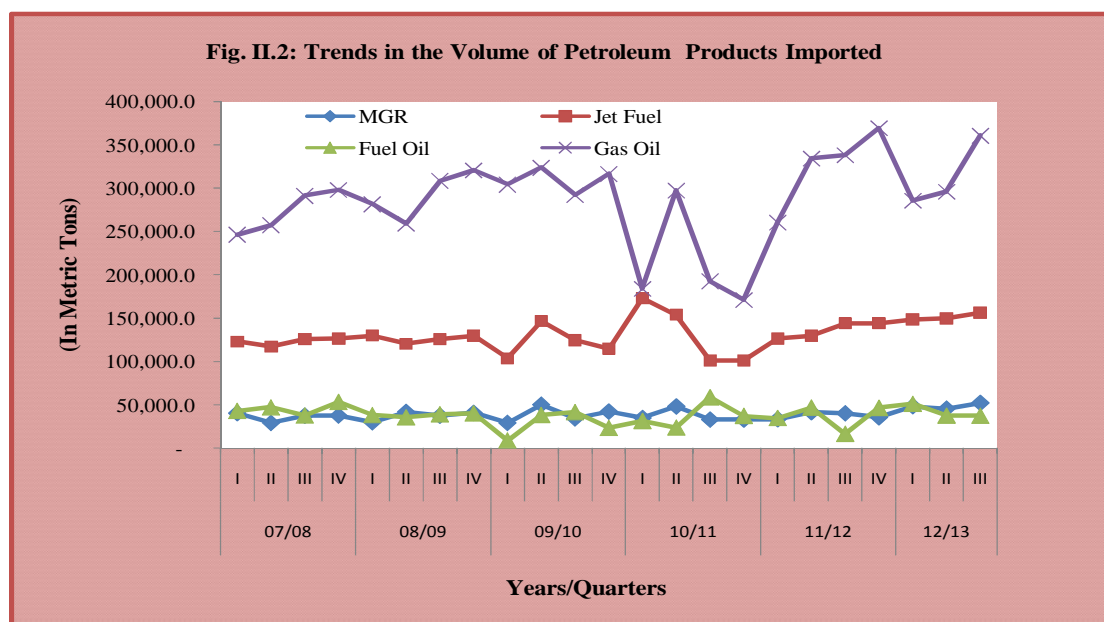
**Source:** Ethiopian Petroleum Enterprise

Likewise, the total volume of petroleum products imported during the period amounted to 606.3 metric tons, depicting a 12.5 percent annual and 14.6 percent quarterly growth rates.

**Table 2.2: Volume of Petroleum Products Imported (In Metric Tons)**

| Petroleum Products     | 2011/12          |              | 2012/13          |              |                  |              | Percentage Change |             |
|------------------------|------------------|--------------|------------------|--------------|------------------|--------------|-------------------|-------------|
|                        | Qtr III          |              | Qtr II           |              | Qtr III          |              | C/A               | C/B         |
|                        | A                | Share (In %) | B                | Share (In %) | C                | Share (In %) |                   |             |
| Regular Gasoline (MGR) | 40,160.9         | 7.5          | 45,607.6         | 8.6          | 52,070.4         | 8.6          | 29.7              | 14.2        |
| Jet Fuel               | 144,199.0        | 26.8         | 149,611.1        | 28.3         | 156,140.9        | 25.8         | 8.3               | 4.4         |
| Fuel Oil               | 16,360.2         | 3.0          | 37,442.0         | 7.1          | 37,332.8         | 6.2          | 128.2             | -0.3        |
| Gas Oil (ADO)          | 338,249.5        | 62.8         | 296,204.4        | 56.0         | 360,766.1        | 59.5         | 6.7               | 21.8        |
| <b>Total</b>           | <b>538,969.7</b> | <b>100.0</b> | <b>528,865.2</b> | <b>100.0</b> | <b>606,310.2</b> | <b>100.0</b> | <b>12.5</b>       | <b>14.6</b> |

Source: Ethiopian Petroleum Enterprise.



Source: Ethiopian Petroleum Enterprise

The average FOB price of petroleum product during the review period declined by 5.2 percent with respect to last year

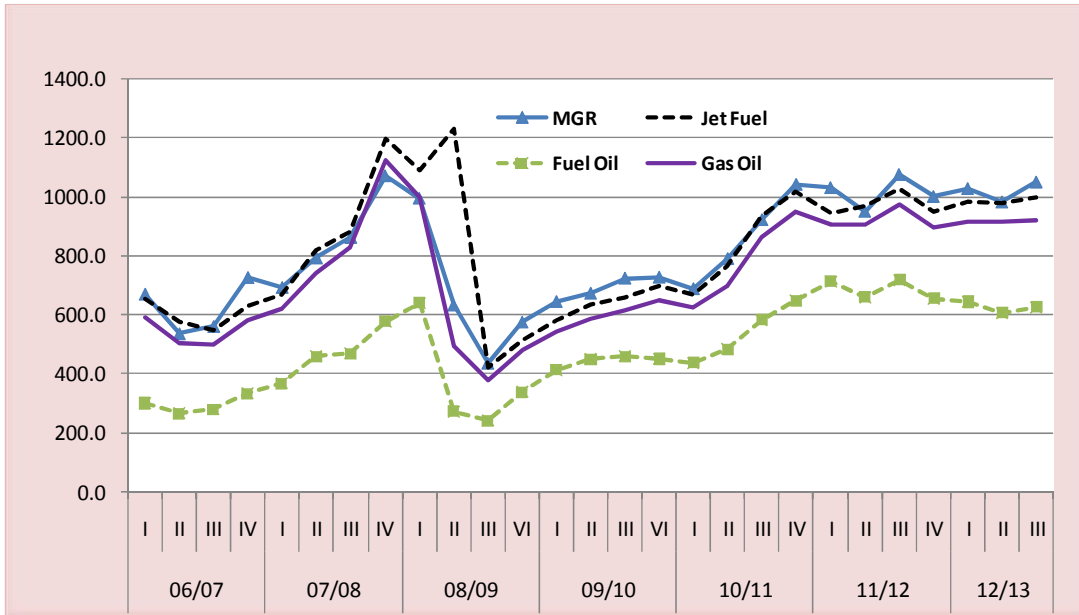
same period mainly due to the reduction in average FOB prices of fuel oil and gas oil.

**Table 2.3: FOB Price of Petroleum Products Imported (In USD/Metric Ton)**

| Petroleum Products     | 2011/12      | 2012/13      |              | Percentage Change |            |
|------------------------|--------------|--------------|--------------|-------------------|------------|
|                        | Qtr III      | Qtr II       | Qtr III      | C/A               | C/B        |
|                        | A            | B            | C            |                   |            |
| Regular Gasoline (MGR) | 1,077.4      | 983.4        | 1,051.7      | -2.4              | 6.9        |
| Jet Fuel               | 1,027.9      | 982.4        | 999.0        | -2.8              | 1.7        |
| Fuel Oil               | 717.9        | 607.0        | 626.5        | -12.7             | 3.2        |
| Gas Oil (ADO)          | 974.0        | 915.3        | 923.8        | -5.1              | 0.9        |
| <b>Average</b>         | <b>949.3</b> | <b>872.0</b> | <b>900.3</b> | <b>-5.2</b>       | <b>3.2</b> |

**Source:** Ethiopian Petroleum Enterprise

**Figure II.3: Trends in FOB price of Petroleum products Imported**



**Source:** Ethiopian Petroleum Enterprise

London Brent crude oil price, used as a reference of international oil price in Ethiopia, stood at USD 94.3 per barrel during the review period compared to the USD 102.9 and USD 88.1 per barrel registered last year same period and the previous quarter, respectively.

The domestic retail prices of petroleum products in Addis Ababa were kept

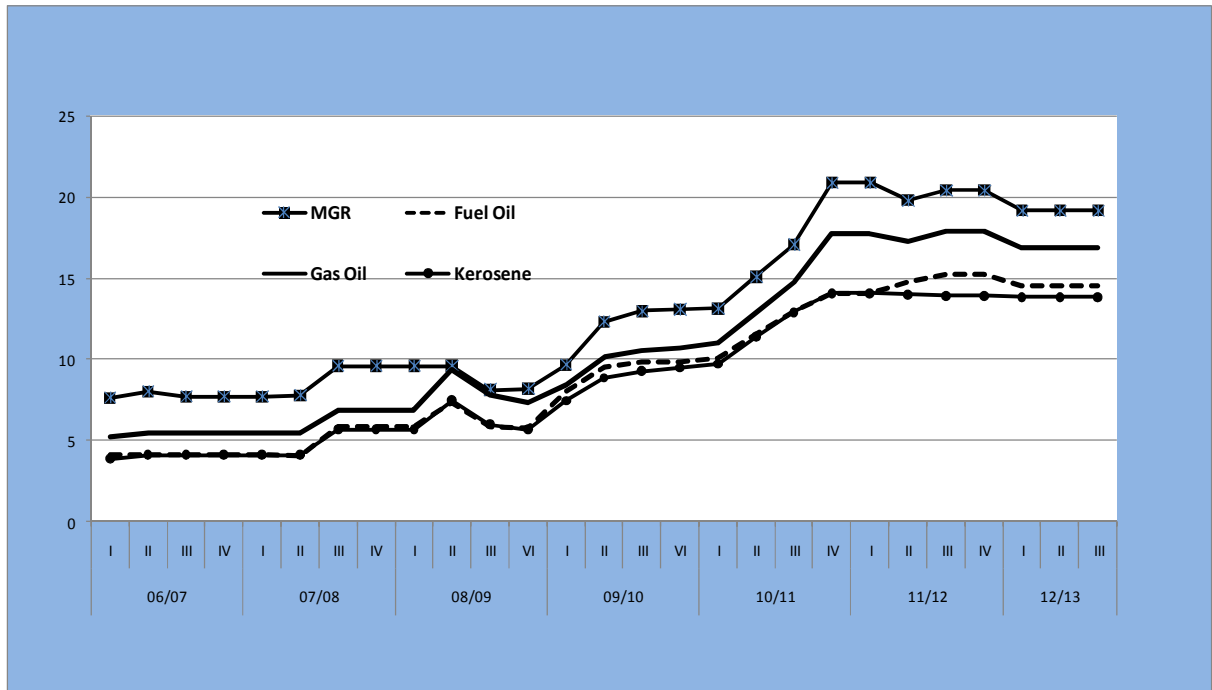
unchanged during the second and third quarters of 2012/13 due to stable international oil price. However, the average retail price of fuel in Addis Ababa was slightly adjusted down wards following the slowdown in international fuel prices. Accordingly, the average retail price in Addis Ababa stood at Birr 16.9 per liter during the review period was about 4.6 percent lower than last year.

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

| Petroleum Products     | 2011/12 | 2012/13 |         | Percentage Change |     |
|------------------------|---------|---------|---------|-------------------|-----|
|                        | Qtr III | Qtr II  | Qtr III | C/A               | C/B |
|                        | A       | B       | C       |                   |     |
| Regular Gasoline (MGR) | 20.4    | 19.2    | 19.2    | -5.9              | 0.0 |
| Fuel Oil               | 15.3    | 14.6    | 14.6    | -4.4              | 0.0 |
| Gas Oil (ADO)          | 17.9    | 16.9    | 16.9    | -5.5              | 0.0 |
| Kerosene               | 14.0    | 13.9    | 13.9    | -0.7              | 0.0 |
| Jet fuel               | 21.3    | 20.2    | 20.2    | -5.2              | 0.0 |
| Average                | 17.8    | 16.9    | 16.9    | -4.6              | 0.0 |

**Source:** Ethiopian Petroleum Enterprise

**Figure II.4: Trends in Addis Ababa Retail Price of Fuel**



**Source:** Ethiopian Petroleum Enterprise

## 2.2 Electric Power Generation

Total electric power generated during the third quarter of 2012/13 showed a 26.2 percent increase over the same quarter last year reflecting an over

growing demand for power in line with the economic growth of the country (Table: 2.5).

**Table 2.5: Electricity Generation** ('000 of K.W.H)

| Power Source  | 2011/12            |              | 2012/13            |              |                    |              | Percentage Change |            |
|---------------|--------------------|--------------|--------------------|--------------|--------------------|--------------|-------------------|------------|
|               | Qtr III            |              | Qtr II             |              | Qtr III            |              |                   |            |
|               | A                  | Share (In %) | B                  | Share (In %) | C                  | Share (In %) | C/A               | C/B        |
| Hydropower    | 1,559,453.8        | 99.0         | 1,832,856.8        | 96.7         | 1,924,540.0        | 96.8         | 23.4              | 5.0        |
| Thermal Power | 1,343.1            | 0.1          | 1,540.6            | 0.1          | 2,090.1            | 0.1          | 55.6              | 35.7       |
| Geothermal    | 3,119.7            | 0.2          | 0.0                | 0.0          | 0.0                | 0.0          | 0.0               | 0.0        |
| Wind          | 11,162.0           | 0.7          | 60,368.8           | 3.2          | 61,556.9           | 3.1          | 451.5             | 2.0        |
| <b>Total</b>  | <b>1,575,078.7</b> | <b>100.0</b> | <b>1,894,766.1</b> | <b>100.0</b> | <b>1,988,186.9</b> | <b>100.0</b> | <b>26.2</b>       | <b>4.9</b> |

**Source:** Ethiopian Electric Power Corporation

Hydropower, constituting about 96.8 percent of the total electric power generation rose by 5 percent wind power by 2 percent and thermal power by 35.7 percent in the same period (Table 2.5).

In terms of system generation, about 99.9 percent of the electric power generated during the review period was through interconnected system (ICS) while the remaining 0.1 percent was from self contained system (SCS) (Table 2.6).



**Table 2.6: Electric power Generation in the Interconnected System (ICS) and Self Contained System (SCS) ('000 of K.W.H)**

| System of Power Supply | 2011/12            |              | 2012/13            |              |                    |              | Percentage Change |             |
|------------------------|--------------------|--------------|--------------------|--------------|--------------------|--------------|-------------------|-------------|
|                        | Qtr III            |              | Qtr II             |              | Qtr III            |              |                   |             |
|                        | A                  | Share (In %) | B                  | Share (In %) | C                  | Share (In %) | C/A               | C/B         |
| <b>ICS</b>             |                    |              |                    |              |                    |              |                   |             |
| Hydro Power            | 1,559,174.2        | 99.0         | 1,832,590.2        | 96.7         | 1,924,209.2        | 96.8         | 23.4              | 5.0         |
| Thermal Power          | 0.0                | 0.0          | 25.3               | 0.0          | 12.5               | 0.0          |                   | -50.6       |
| Geothermal             | 3,119.7            | 0.2          | 0.0                | 0.0          | 0.0                | 0.0          |                   |             |
| Wind                   | 11,162.0           | 0.7          | 60,368.8           | 3.2          | 61,556.9           | 3.1          | 451.5             | 2.0         |
| <b>Sub-Total</b>       | <b>1,573,455.9</b> | <b>99.9</b>  | <b>1,892,984.3</b> | <b>99.9</b>  | <b>1,985,778.6</b> | <b>99.9</b>  | <b>26.2</b>       | <b>4.9</b>  |
| <b>SCS</b>             |                    |              |                    |              |                    | 0.0          |                   |             |
| Hydro Power            | 279.7              | 0.0          | 266.5              | 0.0          | 330.8              | 0.0          | 18.3              | 24.1        |
| Thermal Power          | 1,343.1            | 0.1          | 1,515.3            | 0.1          | 2,077.6            | 0.1          | 54.7              | 37.1        |
| Geothermal             |                    |              | -                  | 0.0          | 0.0                | 0.0          |                   |             |
| Wind                   |                    |              | -                  | 0.0          | 0.0                | 0.0          |                   |             |
| <b>Sub-Total</b>       | <b>1,622.8</b>     | <b>0.1</b>   | <b>1,781.8</b>     | <b>0.1</b>   | <b>2,408.3</b>     | <b>0.1</b>   | <b>48.4</b>       | <b>35.2</b> |
| <b>Grand Total</b>     | <b>1,575,078.7</b> | <b>100.0</b> | <b>1,894,766.1</b> | <b>100.0</b> | <b>1,988,186.9</b> | <b>100.0</b> | <b>26.2</b>       | <b>4.9</b>  |

**Source:** Ethiopian Electric Power Corporation

Third Quarter 2012/13

**Figure II.5 Trends in percentage compositions of electricity generations**

