

PETDER

OIL INDUSTRY ASSOCIATION



2009

Sector Report



BELGIN



ExxonMobil



Shell Gas (LPG)



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I. SUMMARY OF THE 2009 SECTOR REPORT

a) General Outlook of the Fuel Market:

- The **total consumption of automotive fuels** (*Gasolines, Diesel Fuels and LPG Auto-gas*) in 2009 **decreased** by 2.3% reaching **18 million tons**.
- In 2009, **total diesel fuel consumption** (diesel fuel and off-road diesel fuel) has totaled approximately **15.9 million m³** with a 3.9% **decrease** compared to 2008. Consumption of **off-road diesel fuel**, a significant indicator of commercial and industrial activities in Turkey, went back to approximately **11.9 million m³** this year with a **decrease** of 9.4%. **Diesel fuel** (Low Sulfur) consumption continued its progressive rise in 2009, and reached **4 million m³** with an 17.3% rise compared to the previous year.
- Total **gasoline** consumption **decreased** by 2.7% in 2009 compared to 2008, reaching approximately **2.9 million m³**.
- It is estimated that **auto-gas LPG** consumption reached **2.3 million tons** with an **increase** of approximately 9% while total **bulk and bottled LPG** consumption **decreased by 3.6%**, hence it is estimated that the total LPG consumption increased by 4% in total compared to the previous year.
- The consumption of **black products**, including fuel oil and heating oil, has yielded approximately **1.9 million tons this year** with a **decline** of 30.5%. This decrease was approximately 840,000 tons and it represents the greatest percentage decline observed in black products up till present.

- The total lubricant consumption has been estimated to total **461,000 tons** in 2009 with an approximate 10% **fall**.^{*} It is calculated that consumption of lubricants **declined 4%** for **engine lubricants**, **11%** for **gear and transmission lubricants**, **8%** for **chemicals** and **22%** for **industrial lubricants** compared to 2008 figures.

b) Taxes Collected from the Fuel and Automotive Fuels Sectors and their Trading Volumes:

Even with decreasing consumption in the fuel and lubricant sectors, indirect taxes (VAT and SCT) collected from fuel consumption in 2009 expanded 3.5% totalling 29.5 billion TL this year. Similarly, the sum of indirect taxes collected from **LPG consumption** reached **5.5 billion TL** with a **7.1%** rise compared to last year's figure. In total, the amount of indirect tax revenue obtained from fuels and LPG industries together reached **35 billion TL** indicating a **4%** growth of tax revenue.

c) Crude Oil Prices:

The price of crude oil which was 97 USD per barrel in 2008 has exhibited a downward trend this year falling to approximately **62 USD** per barrel in **2009**. Nevertheless, the crude oil prices which was in the range of USD 40 – 80 throughout 2009 is recently picking up speed floating at 70 – 80 USD per barrel level.

d) General Assessment of the Oil Sector for 2009:

The adverse impacts of the global economic downturn started being felt in the fuel sector towards the end of 2008. These effects became much more pronounced throughout 2009 with declining consumption and as financing and crediting problems gained clear weight.

On the public sector front, in March 2009, Competition Authority issued a Competition Board decision restricting the duration of long-term usufruct or lease annotation contracts set to preserve no-competition clause between fuel distribution companies and fuel / LPG stations (dealers) to a maximum of five years. This decision will be the most important debated topic of for the industry for the coming period.

Another important regulation from the public sector that occurred in 2009 for the oil industry has been the **price cap** regulation implemented for diesel fuels and gasolines through EMRA. Following a two month probation period this regulation has been uplifted and free market application has been readapted.

^{*} This estimation is calculated through the data provided by those companies that participated in our data collection system. These companies account for 65% of the market share in the industry.

On the other hand, July 15, 2009 and December 31, 2009 saw a rise in the amounts of fixed SCT collected from several types of fuels regulated by the Ministry of Finance. It has been observed that after this adjustment in SCT, consumption through legal means have been badly affected and resulted in the augmentation of illegal operations, also, leading to significant tax revenue losses. Especially, activities performed under the title of 'number 10 lub', etc. have peaked this year reaching noteworthy numbers. These type of activities provide important explanations for the decline in the off-road diesel fuel consumption experienced in 2009 which had been continuously rising for the past five years. In estimates market operations such as mixing of base lubricants and waste lubricants with fuels sum up to more than 500,000 tons annually and accounts for well over 600 million TL/year of tax revenue loss.

e) Summary Table

Annual Consumptions		2008	2009	Difference	Change
White Products Total	<i>m3</i>	19,615,422	18,880,398	-735,024	-3.7%
Unleaded Gasoline 95 Octane	<i>m3</i>	2,602,498	2,589,832	-12,666	-0.5%
Unleaded Gasoline 97 and Higher Octane	<i>m3</i>	310,926	294,493	-16,433	-5.3%
LRP Additivated Unleaded Gasoline	<i>m3</i>	110,902	57,709	-53,193	-48.0%
Total Gasolines	<i>m3</i>	3,024,326	2,942,034	-82,292	-2.7%
Kerosene	<i>m3</i>	13,624	11,171	-2,453	-18.0%
Off-road Diesel Fuel	<i>m3</i>	13,161,773	11,919,770	-1,242,003	-9.4%
Diesel Fuel (Low Sulfur)	<i>m3</i>	3,415,699	4,007,423	591,724	17.3%
Total Diesel Fuels	<i>m3</i>	16,577,472	15,927,193	-650,279	-3.9%
White Products Total	<i>ton</i>	16,362,716	15,747,491	-615,224	-3.8%
Unleaded Gasoline 95 Octane	<i>ton</i>	2,016,936	2,007,120	-9,816	-0.5%
Unleaded Gasoline 97 and Higher Octane	<i>ton</i>	240,968	228,232	-12,736	-5.3%
Additivated Unleaded Gasoline	<i>ton</i>	85,949	44,724	-41,225	-48.0%
Total Gasolines	<i>ton</i>	2,343,853	2,280,076	-63,776	-2.7%
Kerosene	<i>ton</i>	10,899	8,937	-1,962	-18.0%
Off-road Diesel Fuel	<i>ton</i>	11,121,698	10,072,206	-1,049,493	-9.4%
Diesel Fuel (Low Sulfur)	<i>ton</i>	2,886,266	3,386,272	500,007	17.3%
Total Diesel Fuels	<i>ton</i>	14,007,964	13,458,478	-549,486	-3.9%
Heating Oil	<i>ton</i>	384,736	320,531	-64,205	-16.7%
Fuel Oil No: 6	<i>ton</i>	2,373,363	1,596,687	-776,676	-32.7%
Black Products Total	<i>ton</i>	2,758,099	1,917,218	-840,881	-30.5%
Total Fuel*	<i>ton</i>	19,120,815	17,664,709	-1,456,105	-7.6%
LPG/Bottled**	<i>ton</i>	1,177,269	1,109,000	-68,269	-5.7%
LPG/Bulk**	<i>ton</i>	171,528	190,000	18,472	11.0%
LPG/Autogas**	<i>ton</i>	2,111,557	2,300,000	188,443	8.9%
Total LPG**	<i>ton</i>	3,460,354	3,599,000	138,646	4.0%
Total Automotive Fuels***	<i>ton</i>	18,463,373	18,037,834	-425,539	-2.3%
Engine, Gear and Transmission Lubricants****	<i>ton</i>	235,000	223,000	-12,000	-5.1%
Industrial and Marine Lubricants and Greases****	<i>ton</i>	230,000	194,000	-36,000	-15.7%
Chemicals****	<i>ton</i>	48,000	44,000	-4,000	-8.3%
Total Lubricants****	<i>ton</i>	513,000	461,000	-52,000	-10.1%
Brent crude oil	<i>USD/Barrel</i>	97.0	62.0	-35.0	-36.1%
Consumption Trading Volume/ Fuel *****	<i>Billion TL</i>	57.2	51.4	-5.8	-10%
Total Indirect Tax/ Fuel *****	<i>Billion TL</i>	28.5	29.5	1.0	4%
Consumption Trading Volume/ LPG *****	<i>Billion TL</i>	11.7	11.7	0.0	0%
Total Indirect Tax/ LPG *****	<i>Billion TL</i>	5.1	5.5	0.4	8%

* Represents black + white products,

** Calculated based on EMRA LPG Sector Report figures.

*** Aggregate of Gasolines, Diesel Fuels and Auto-gas

**** Lubricant consumption is the aggregate market estimation calculated using data of companies representing 65% of the market which provide data regularly.

***** Approximate values calculated based on consumption and unit prices

Data relating to the Fuels were compiled by PwC, based on the statements made by 11 distribution companies and data relating to the Lubricants were compiled based on the statements made by 5 distribution companies voluntarily.

II. TURKEY’S FUEL STATISTICS FOR 2009

a) Diesel Fuels

Consumption of **diesel fuel** which had been rising steadily for the last five years declined for the first time in 2009. In 2009, total consumption of **diesel fuel** types (diesel fuel and off-road diesel fuel) approximated to **15.9 million m³** decreasing 3.9% compared to 2008.

On a different note, the share in **total** consumption of **diesel fuel (with low sulfur)** reached **4 million m³** with a 17.3% rise in 2009, effectively making a leap from **20% to 25% in consumption calculated within the total consumption of all diesel fuels**. Nonetheless, the fact consumption of **off-road diesel fuel** – having the largest share among the types of diesel fuels - fell back to approximately **11.9 million m³** this year with a 9.4% decrease points towards an important market change in the sector. Hence, in contrast to recent years, the consumption of off-road diesel fuel exhibited a considerable decrease of approximately 1.2 million tons.

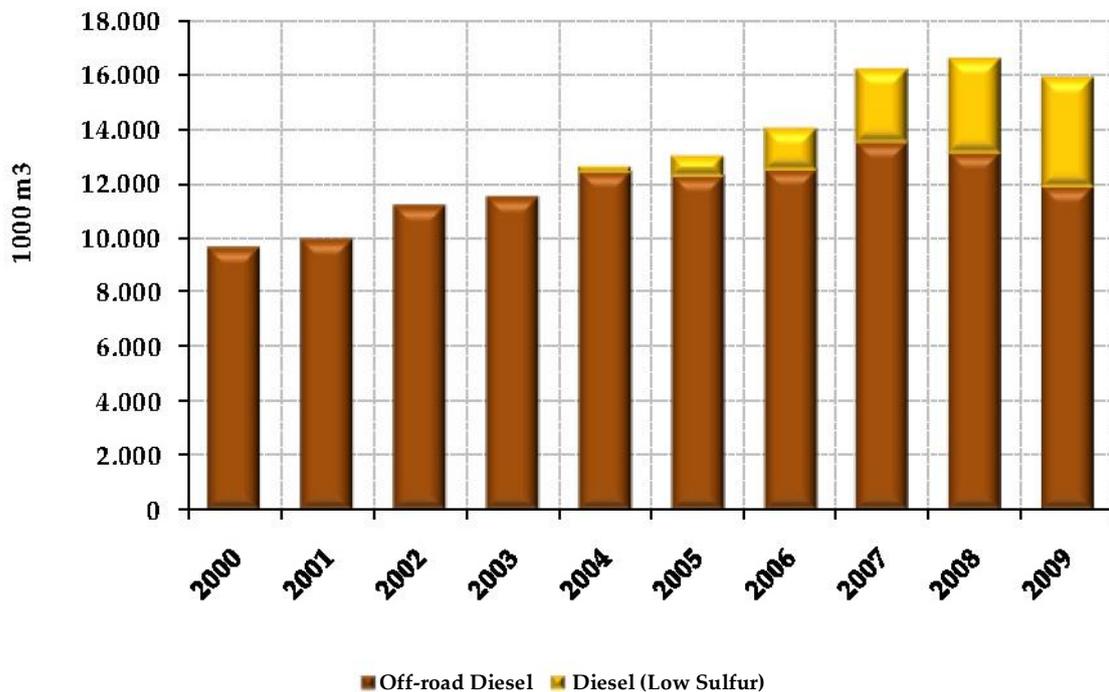


Figure 1: Total Diesel Fuel Consumption According to Years (m³/year)

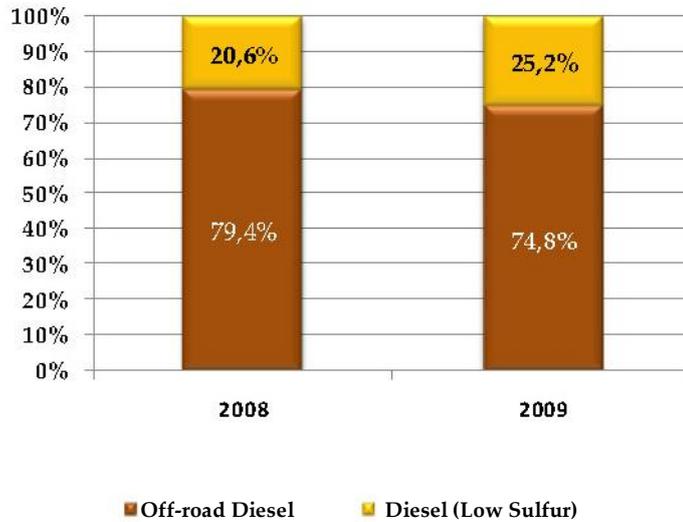


Figure 2: Shares of off-road diesel fuel and diesel fuel in total diesel fuel consumption.

The chart below demonstrates the consumption progress in the last five years of off-road diesel fuel and diesel fuel (with low sulfur). The point drawing attention here is the serious decline observed in the consumption of off-road diesel fuel in 2009 (9.4%). A continuous increase has occurred in the consumption of diesel fuel (with low sulfur) due to the release of the new generation diesel engine vehicles. Thus, as can be observed from the graph below the upward trend in off-road diesel fuel consumption has steadily continued until 2009. In 2009, on the other hand, consumption of diesel fuel has continued its rise concurrently as consumption of off-road diesel fuel entered a period of decline (1.24 million m³). Although a certain part of this drop can be attributed to the transition to low sulfur diesel fuel, it is believed that the main reason arises from the sale of various non-fuel products introduced in the diesel fuel market under titles such as ‘number 10 lube’. This issue is discussed in depth in the following section while general industry problems of 2009 are analyzed.

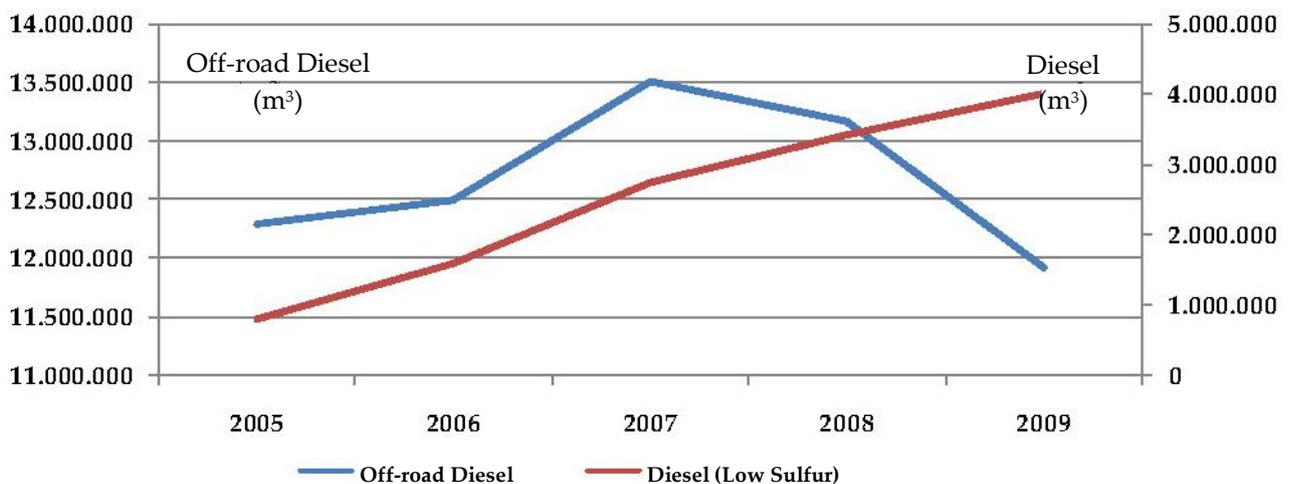


Figure 3: Yearly consumption trends of off-road diesel fuel and diesel fuel

a) Gasolines

Gasoline, is another product that experienced a shrink in its consumption in 2009 **decreasing** by 2.7% and reaching approximately **2.9 million m³**. The fact that LPG auto-gas, a substitute product, which has a price advantage over gasoline due to lower SCT is an important factor in this loss. In fact, for the first time, auto-gas LPG consumption has surpassed gasoline consumption in tons during the year 2009.

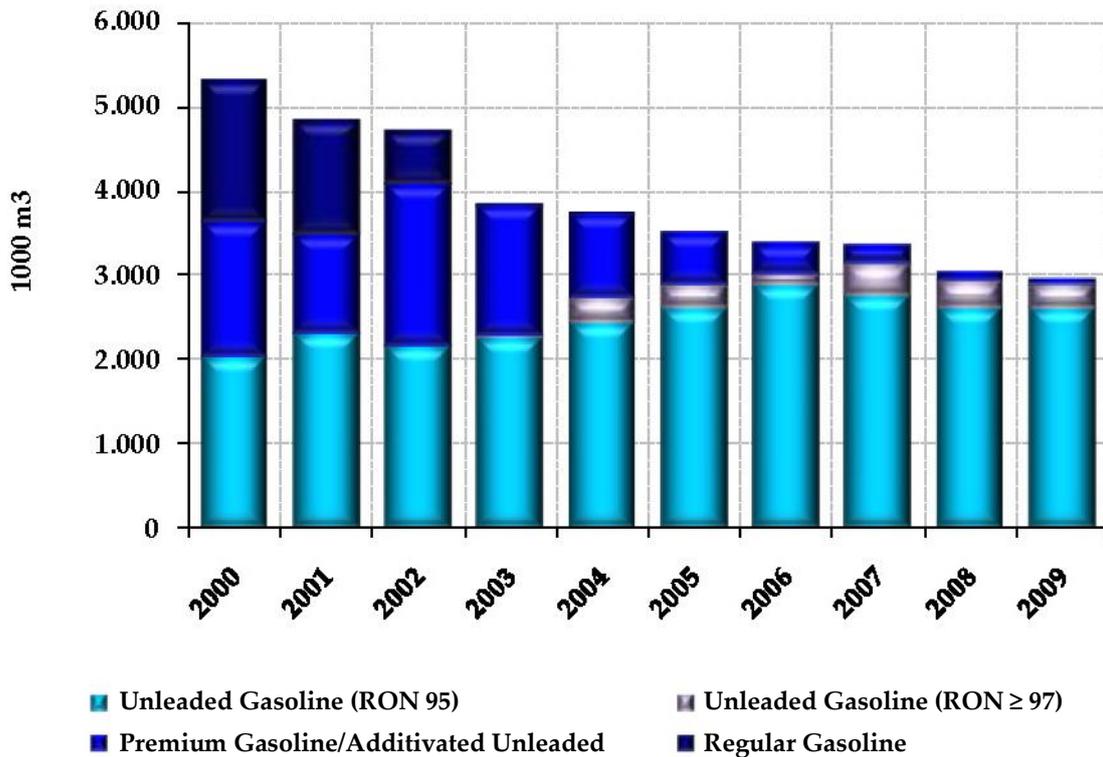


Figure 4: Change in total gasoline consumption by years.

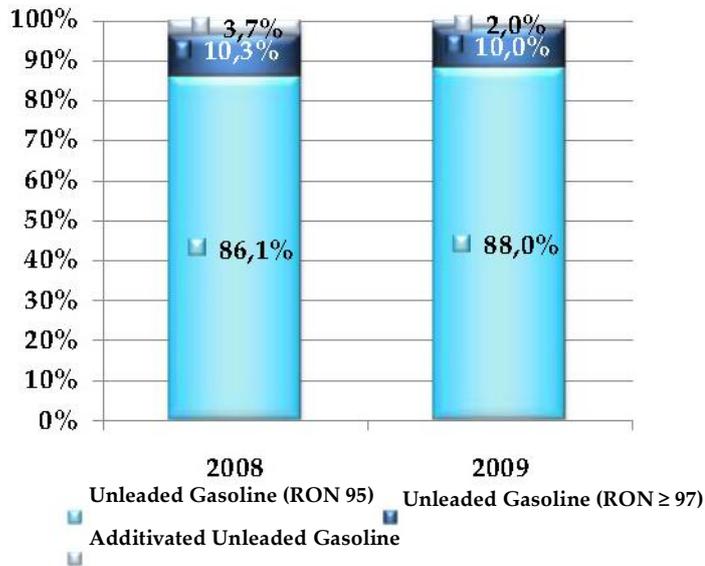


Figure 5: Shares of types of gasoline in total gasoline consumption.

c) Automotive Fuels

The total automotive fuels (*Gasoline, Diesel Fuels and LPG Auto-gas*) consumption **decreased** by 2.3% and reached **18 million tons** in 2009.

The following chart demonstrates consumption progression for the last ten years for all automotive fuels. Considering the last seven-year period, only in 2009 has a decline been observed in the automotive fuels consumption.

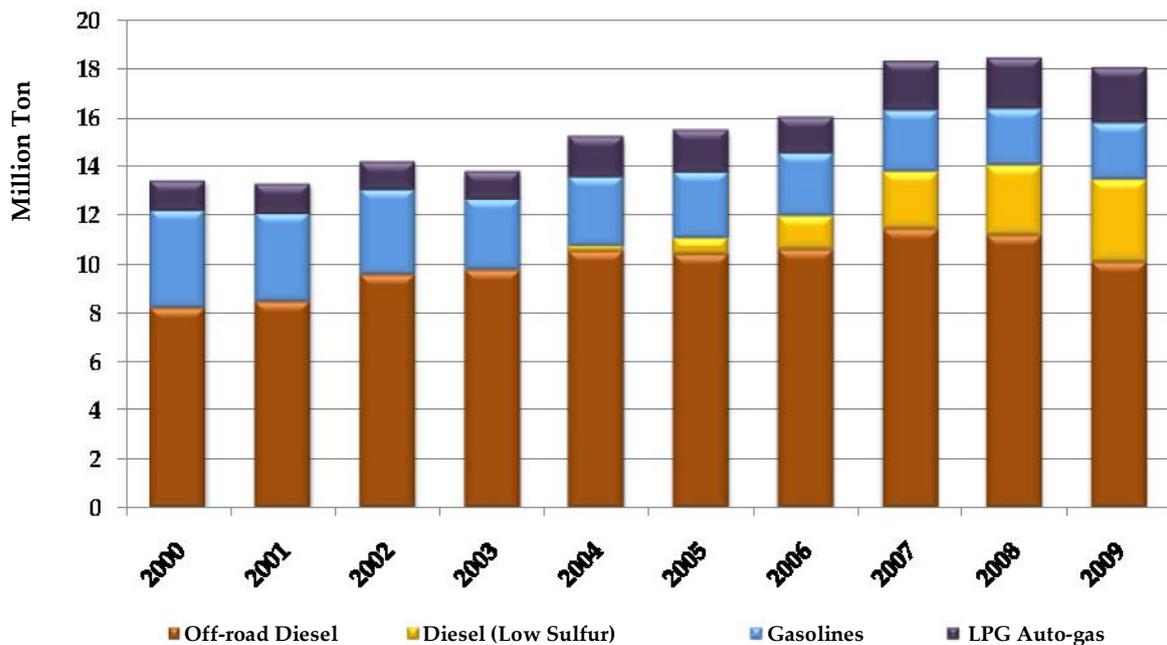


Figure 6: Change in automotive fuel consumption by years.

As stated previously auto LPG consumption has surpassed gasoline consumption (in tons). And, as of 2009, Auto-gas consumption has gone over 2.3 million tons with gasoline consumption remaining at 2.28 million tons.

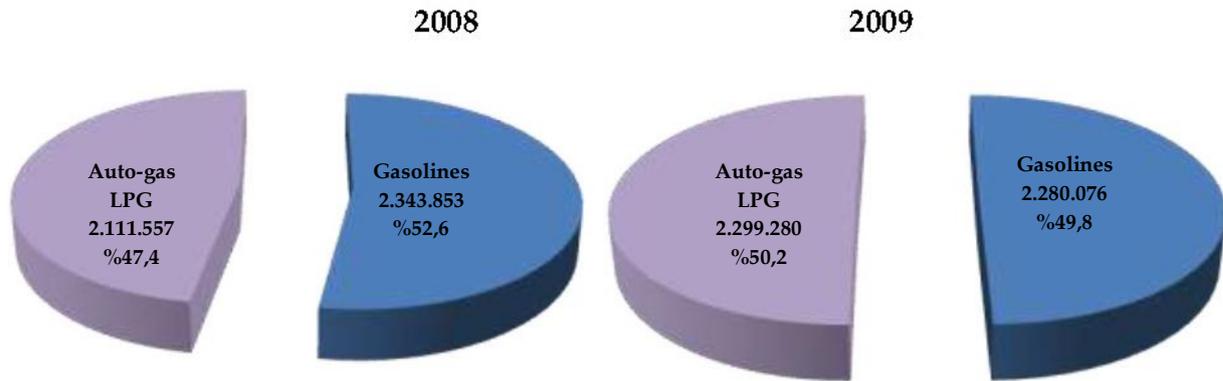


Figure 7: Comparison of year 2008 and 2009 gasoline and auto-gas LPG consumptions.

d) Black Products

Black product consumption has reached approximately **1.9 million tons** in 2009 shrinking 30.5%. In this period, **heating oil** consumption has reached **321,000 tons** with a decrease of 16.7% and **Fuel Oil No: 6** consumption has totalled **1.6 million tons** with a decrease of 32.7% (approximately 840,000 tons). Hence, the progressive decline in black products has continued and the contraction in the black product market has reached its largest rate over the last 10 years (30.5%). These changes can be seen clearly in the following two graphs.

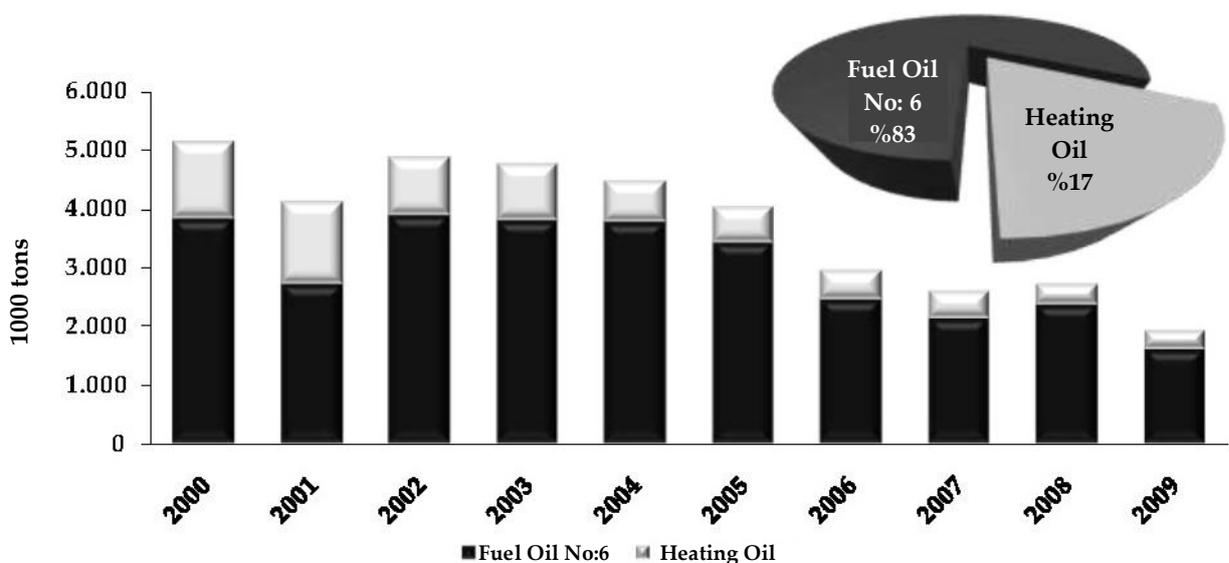


Figure 8: Change in black products consumption throughout years.

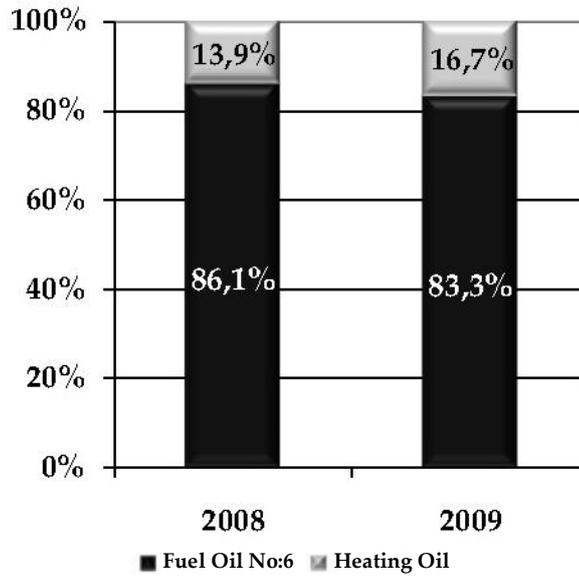


Figure 9: Shares of black product consumption in total black product consumption.

The contraction (approximately 840,000 tons) experienced in the black products market in 2009 has been significant. In this regards, the contraction which has prolonged over the years in fuel oil and heating oil consumption is mostly caused by the transition to natural gas. The below graph analyzes the correlation between fuel oil/heating oil consumption and natural gas consumption which is worthy of attention and explains this situation clearly.

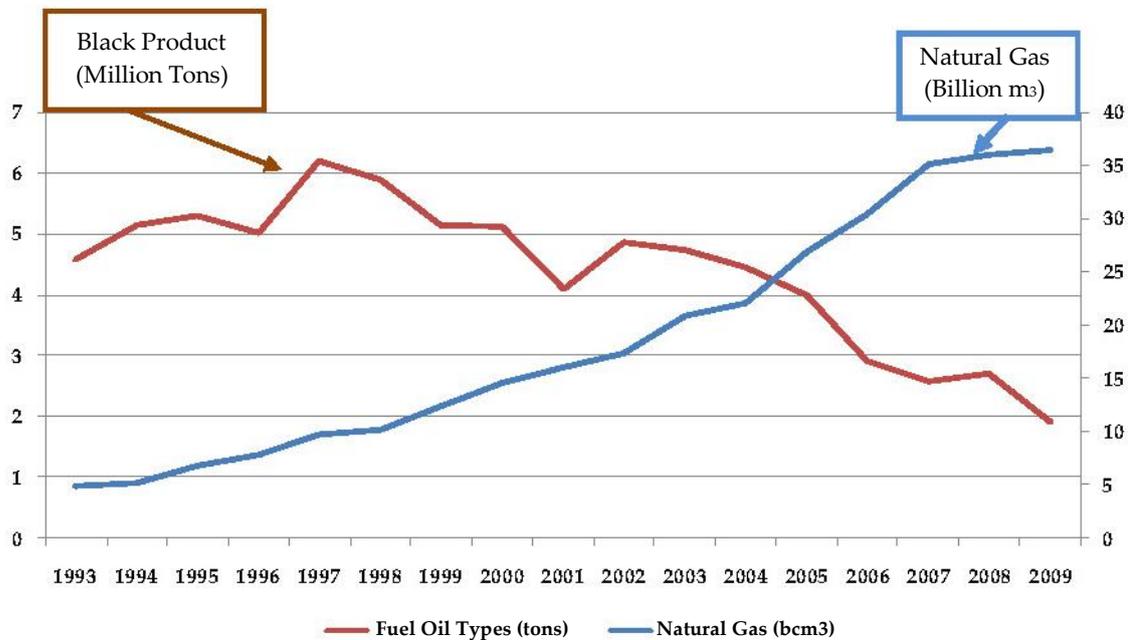
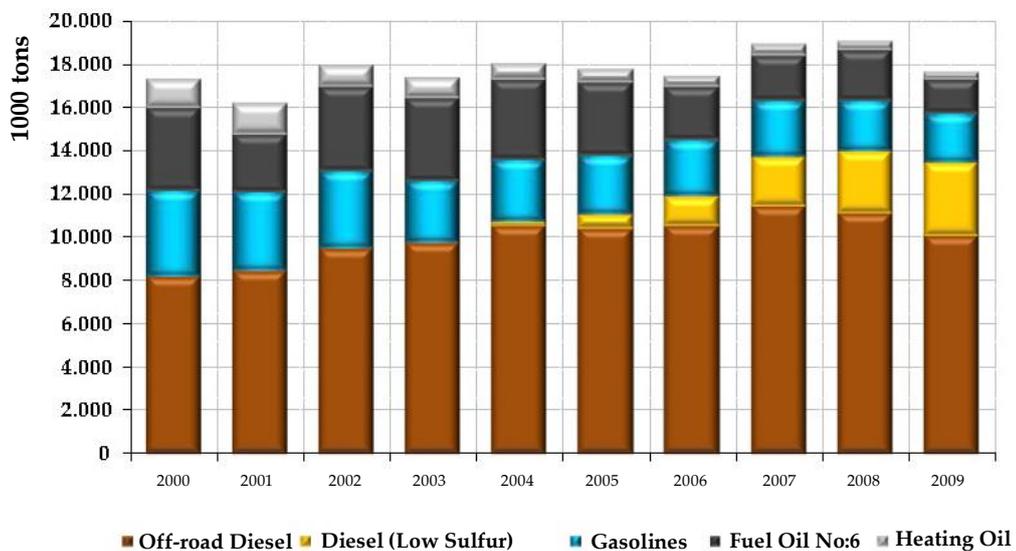


Figure 10: Change in consumption of black products and natural gas by years.

e) Fuels

Total fuel (*Gasolines, Diesel Fuels, Kerosene, Heating Oil and Fuel Oil*) consumption has been approximately **17.7 million tons in 2009** with a **decline** of **7.6%**. As the chart below portrays, the aggregate fuel oil consumption in Turkey has remained at the same level for many years. Fuel consumption after having exceeded in 2007 and 2008 has fallen back to its previous value range in 2009.

Figure 11: Change in total fuel consumption by years.



This chart which indicates the change in fuel consumption in Turkey demonstrates that the share of diesel fuel has been growing rapidly while black product consumption has been declining and in consequence, fixing aggregate fuel consumption at the level of 18 million tons.

The next chart demonstrates that diesel fuel consumption has reached a significant amount totalling 76.2% of total fuels with a figure of 57% for off-road diesel fuel and 19.2% for low sulfur diesel fuel.

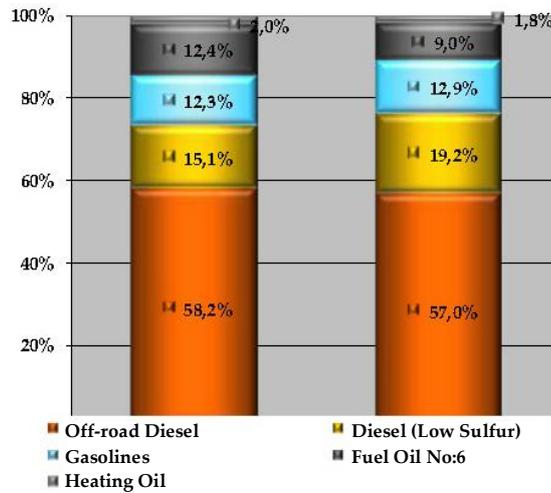


Figure 12: Shares of types of fuel in total fuel consumption.

f) Lubricants

Through the information obtained from ALPET, BP, CASTROL, LUKOIL, OPET, POAŞ, SHELL, TOTAL, and MOIL, companies that represents approximately 65% of the whole market, the total amount of lubricants consumption **decreased** by 10% compared to the same period of last year.[†] As such, Turkey’s total lubricant consumption has been calculated as 461,000 tons as of 2009. The comparative chart of the annual total lubricant products market is given below.

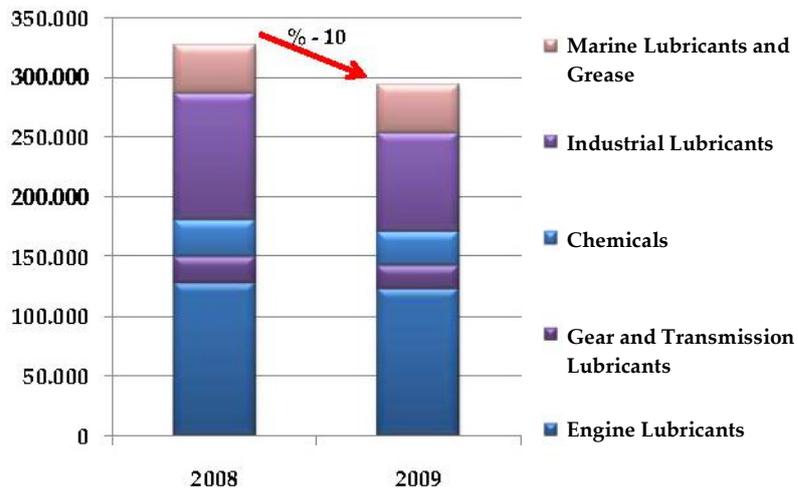


Figure 13: Lubricant consumption for years 2008 and 2009 (Tons).

[†] In this section, assessments relating to the lubricant market of Turkey has been evaluated through data compiled by PWC which includes firms that represent 65% of the market.

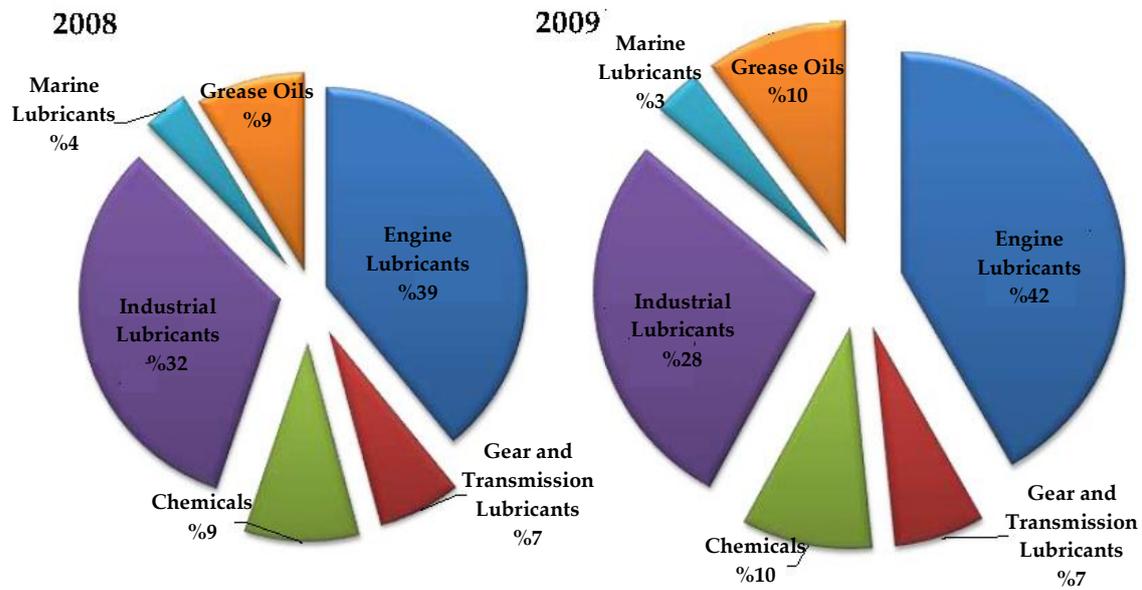


Figure 14: Shares of product groups in lubricants in years 2008 and 2009 (%). **At lubricant consumption representing approximately 65% of total consumption!*

- **Engine Oils**

In 2009, consumption of engine oils (monograde and multigrade) has **decreased** by **10%** compared to the past year. The aggregate engine lubricant sales of the 8 companies which provided data for this evaluation amounted to **123,000 tons**. According to the data provided by the Ministry of Environment and Forestry, the total engine lubricant market of Turkey is approximately 200,000 tons. During this period, engine lubricants amounted to approximately 42% of the total lubricant products. Comparative charts on engine lubricant consumption are given below;

Engine Lubricants Consumption (Tons)

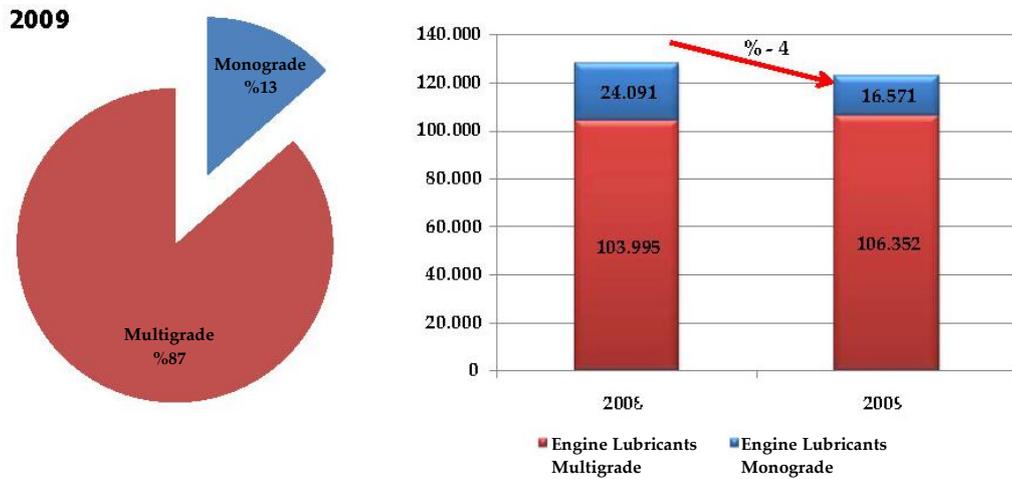


Figure 15: Amount of consumption (tons) and shares (%) of engine lubricants in years 2008 and 2009. (At lubricant consumption representing approximately 65 % of total consumption)

-
- *Industrial Lubricants*

Total consumption of industrial lubricants (hydraulic, process, other) yielded approximately **83,000 tons** in 2009 with a **decrease** of **22%**. During this period, industrial lubricants constructed approximately 28% of shares within the total lubricant products. The comparative charts of industrial lubricant consumption are given below;

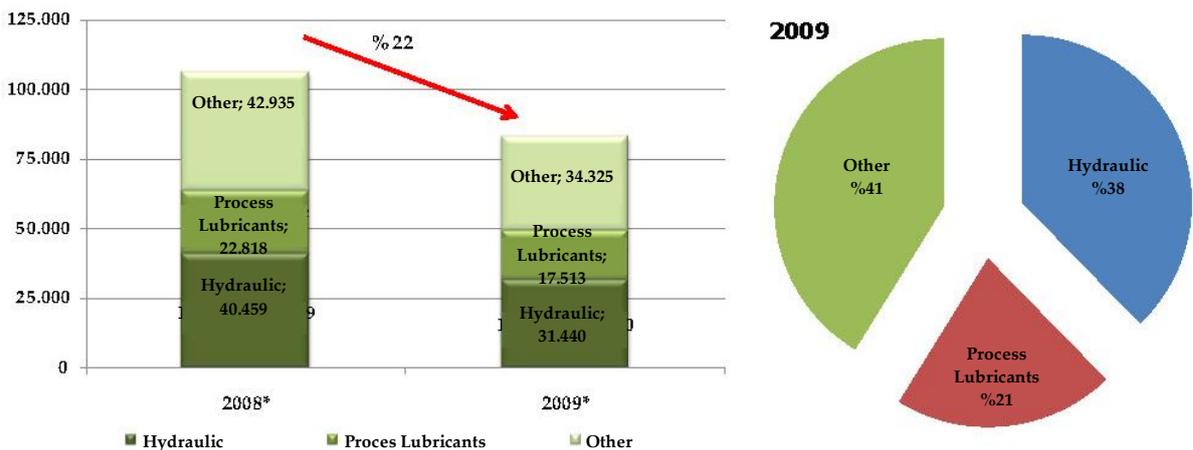


Figure 16: Amount of consumption (tons) and shares (%) of industrial lubricants in years 2008 and 2009.

**At lubricant consumption representing approximately 65% of total consumption!*

III- INDIRECT TAXES AND TRADING VOLUMES:**a) Duties and Taxes on Energy Product**

The fuel and LPG sector are among the leading sectors that provide a significant amount of taxes to the government through indirect taxes. On July 15, 2009 and December 31, 2009, SCT levied on fuel and LPG was rearranged by Republic of Turkey Ministry of Finance. The new SCT amounts and charges is given below.

The table below suggests that SCT on fuels has become greatly disparate from other energy products as a result of the recent tax increases.

	Unit	Old SCT	New SCT (31 December 2009)	Change (TL)	Change (%)	VAT (%)
Unleaded Gasoline 95	TL/Lt	1.6915	1.8915	0.20	11,8%	18%
Unleaded Gasoline 98	TL/Lt	1.8915	2.0135	0.12	6,4%	18%
LRP Additivated Unleaded Gasoline	TL/Lt	1.6915	1.8915	0.20	11,8%	18%
Off-road Diesel	TL/Lt	1.0845	1.2345	0.15	13,8%	18%
Diesel Fuel (D. K.)	TL/Lt	1.1545	1.3045	0.15	13,0%	18%
Kerosene	TL/Lt	0.7605	0.7605	0.00	0,0%	18%
Fuel Oil No: 6,	TL/Kg	0.2240	0.2240	0.00	0,0%	18%
Heating Oil	TL/Kg	0.4760	0.4760	0.00	0,0%	18%
Auto-gas LPG	TL/Lt	0.6149	0.7157	0.10	16,4%	18%
Other LPG	TL/Kg	1.0300	1.2100	0.18	17,5%	18%
Natural gas (home+industry)	TL/m3	0.0230	0.0230	0.00	0,0%	18%
Natural gas (motor vehicles)	TL/m3	0.6964	0.6964	0.00	0,0%	18%
Coal	TL/Kg	0.000	0.000	0.00	0,0%	18%

Table 1: SCT charges on certain important energy products as of December 31, 2009

As the above table shows, gasoline has continued to be the product with the highest SCT charge among energy products with the recent SCT adjustment and as a matter of fact, the difference in taxes on gasoline and other energy products has grown even further. This is demonstrated more clearly in the graph below.

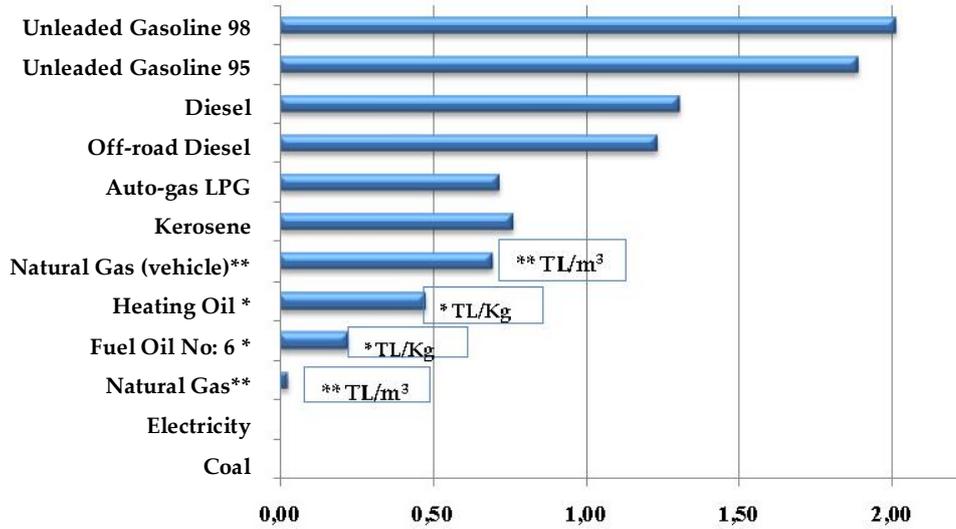


Figure 17: Effective SCT charges as of 31.12.2009 on fuel and some other energy products (TL/lt).

Indeed, indirect taxes are the most important part of the price paid by the consumer in the fuel sector. For example, when the SCT, which is 1.8915 TL per liter on gasoline is combined with VAT which is 0.557 TL /lt (where pump sale price is 3.65 TL /lt), a total of 2.448 TL /lt of the total pump price is collected as indirect tax, hence the share of indirect taxes on gasoline constitutes more than 67% of the total pump price (3.65 TL/lt). As oil products like gasoline, diesel fuel and LPG are all energy products, it is appropriate to compare the magnitude of taxes with other products in terms of costs imposed on the consumer. The share among prices imposed on the consumer of indirect taxes (SCT+VAT) on various energy products is shown in the graph below.

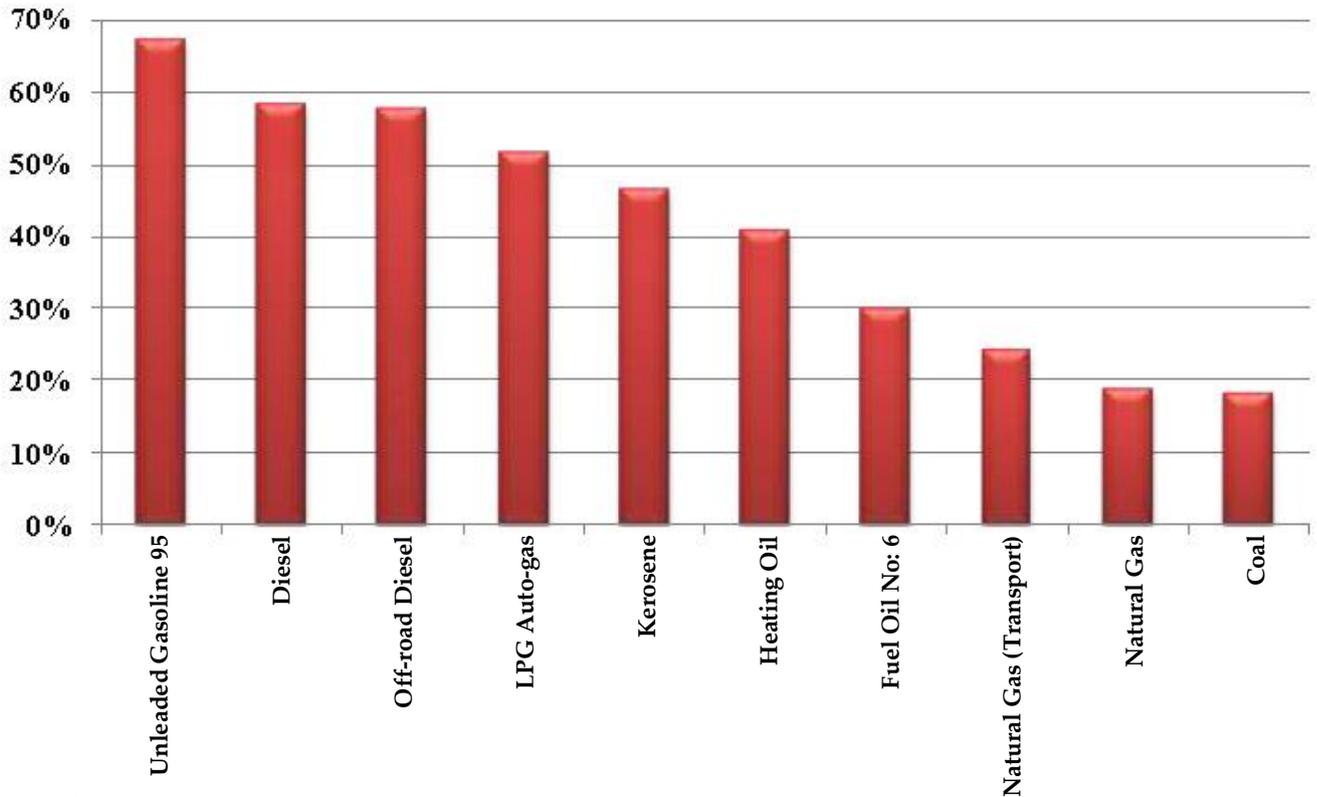


Figure 18: Share of indirect taxes on consumer prices of various energy products (%).

b) Indirect Taxes Collected from the Oil Sector:

In the previous section, the rate of indirect taxes collected from fuel and LPG sectors has been analyzed. The graph below shows indirect tax revenue obtained from fuel and LPG within the course of seven years. As demonstrated, indirect taxes collected from fuel and LPG sectors have been rising sequentially each year, and reached 35 billion TL/year as of 2009. Again, as the graph indicates, during the last five years of the 2004-2009 period, the fuel sector has provided tax revenue of about 150 million TL.

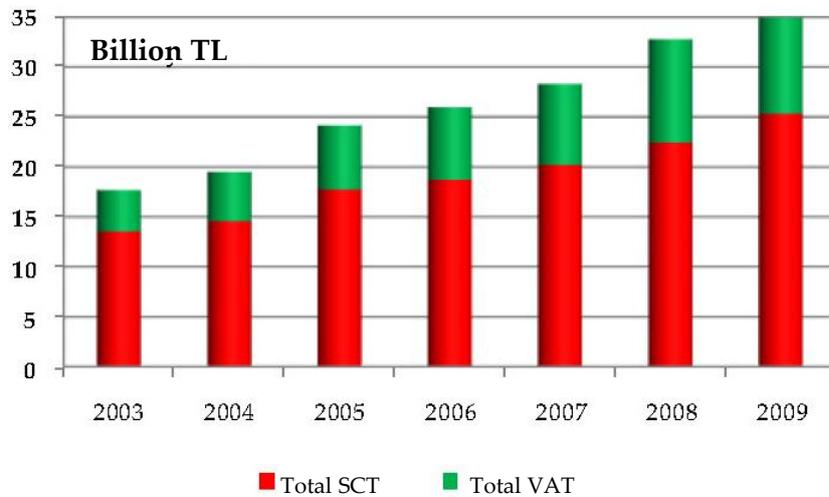


Figure 19: Change over the years of total indirect taxes collected on fuel and LPG.

According to calculations, indirect taxes collected from fuel consumption in 2009 (VAT and SCT) have reached 29.5 billion TL with a 4% **increase** over the past year, similarly, indirect taxes collected from total LPG consumption has amounted to 5.5 billion TL with a 8% **increase**. Hence, it is calculated that the indirect tax revenue collected from fuel and LPG sectors together amount to **35 billion TL** with a 4% **rise** over the past year. The following graphs show the breakdown of the indirect tax revenue obtained from fuel and LPG sectors as in types of product.

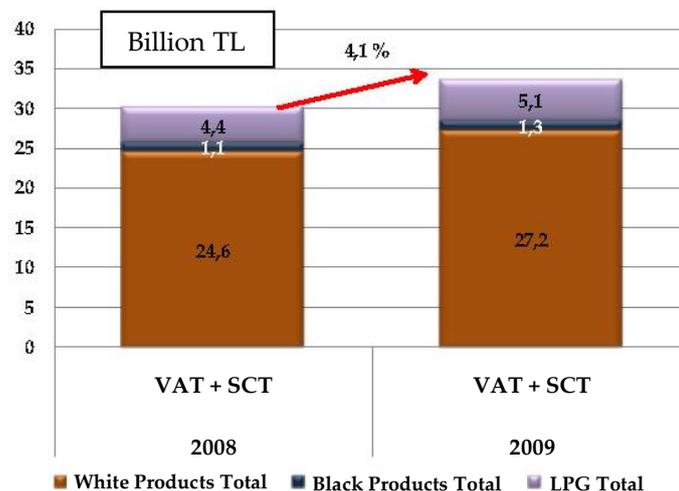


Figure 20: Indirect tax revenue obtained from fuel and LPG sectors

c) Trade Volumes :

As indirect taxes reflect profoundly on the price paid by the consumer, sector volumes have also seen a significant drop in their trading volumes due to falling consumption, this contraction was especially high for off-road diesel fuel and black products consumption.

The next two graphs below show the sectoral magnitudes calculated for fuel and LPG. Trade volume in the fuel sector has **decreased approximately by 10% in 2009, producing a figure of 51.4 billion TL**. In the LPG sector, on the other hand, the impact of the significant growth in auto-gas has compensated for the contraction in bottled and bulk LPG, with the total trade volume of 11.7 billion TL remaining stable without any change compared to the previous year. Hence, the total magnitude calculated of Fuel+LPG has declined from 68.9 billion TL to **63.1 billion TL**.

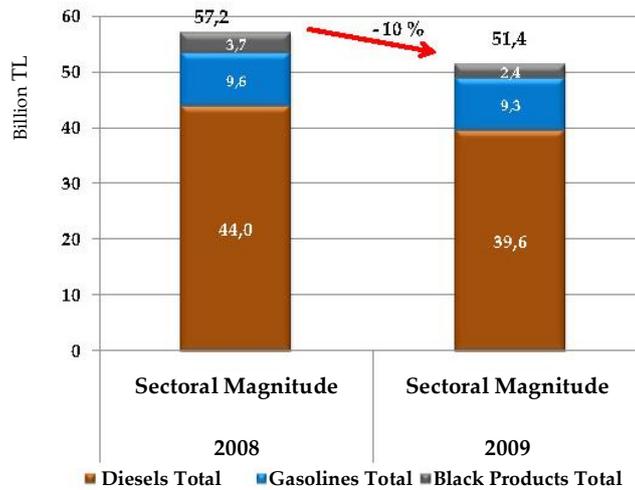


Figure 21: Trade volumes in fuel industry in years 2008 and 2009 (Billion TL).

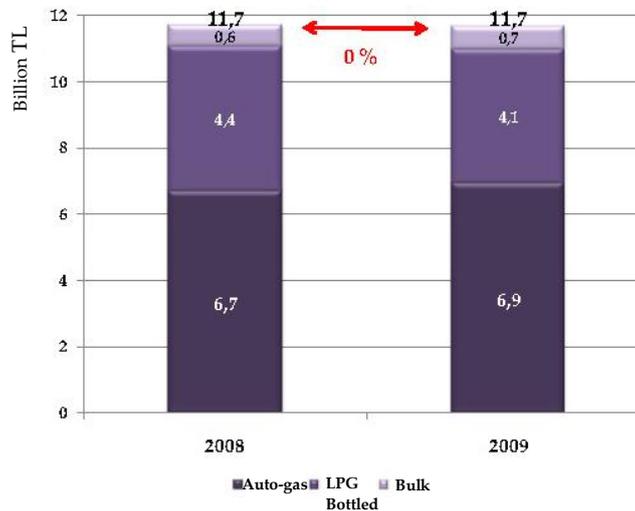


Figure 22: Trade volumes in LPG industry in years 2008 and 2009 (Billion TL).

Looking from the perspective of taxes and sectoral trading volumes, another important matter which needs close attention is the share values of oil and oil products among Turkey's total energy product consumption and the calorific values of energy products.

d) Calorific Value of and Taxation on Energy Products:

The following graph gives an indication of the total energy product consumption in Turkey in terms of the types of energy, namely, hydro-energy, natural gas, coal and oil product consumption over the last 10 years. As the graph below portrays, total primary energy demand of Turkey is satisfied 31% through oil products, 32% through natural gas, 30% through coal and 7% through other resources (renewable, etc.) as oil equivalent. The share of oil in the total energy demand in the last decade has remained constant with natural gas rising from 13.1 to 32.5 mtoe and coal from 25.5 to 30 mtoe.

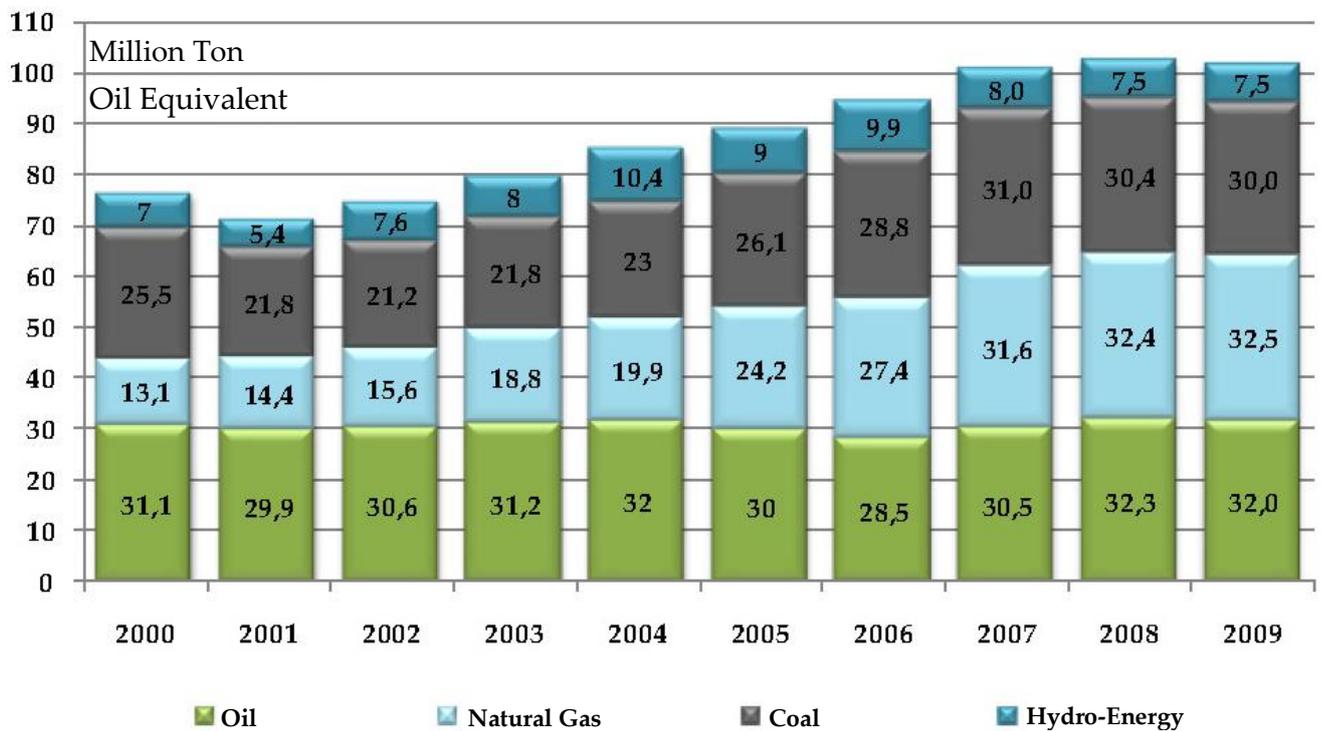


Figure 23: Change in primary energy consumption in Turkey by types and years.

The next graph shows the correlation between taxes collected from energy products and the consumption volumes of each product. Here, oil accounts for 32% of Turkey's total energy demand, representing 89% of indirect taxes collected from all types of energy. This suggests that as an energy resource, oil is taxed much more and at a much greater rate compared to natural gas and coal.

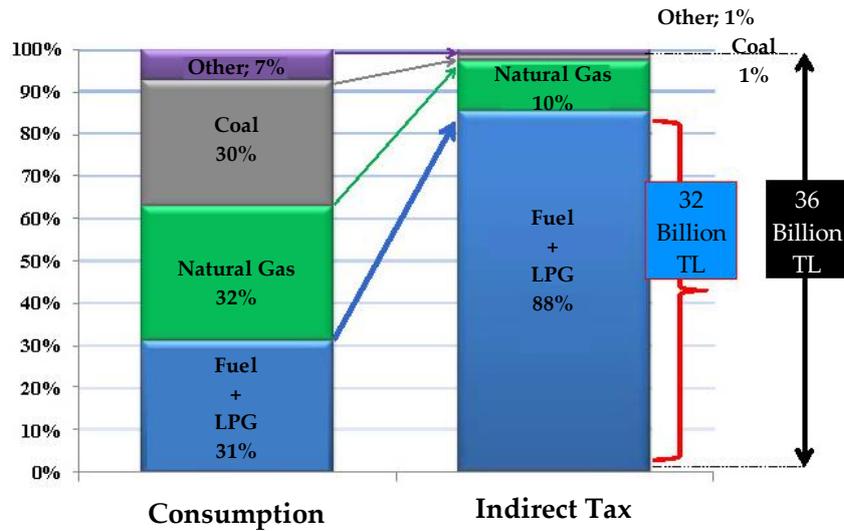


Figure 24: Shares of types of energy in Turkey’s energy consumption and obtained indirect tax revenue.

In taxation of energy products, high tax rates are common all over European countries. At this point it is also essential to analyze Turkey’s position in terms of fiscal policies on energy products compared to the European market. This point is addressed in the next section.

e) Taxes on Energy Products; Turkey/Europe

Turkey, which has always ranked amongst the top countries which apply high taxes on fuel, has become the country where the highest tax is levied in the world on gasoline and diesel fuel following a SCT adjustments made on July 15, 2009 and December 31, 2009. The below graph compares the sum of indirect taxes (VAT + SCT) on Unleaded Gasoline and Diesel Fuel (low sulfur) as of December 31, 2008 with other European countries. As these two graphs demonstrate, Turkey has the highest tax in Europe (and the world) with a total indirect tax revenue of 1.13 €/lt received from gasoline. The closest country to Turkey in this aspect is the Netherlands with which there is a difference of 0.21 € /lt (approximately 45 kuruş/lt). Likewise, Turkey’s tax charge is more than twice of Greece, Bulgaria and Romania. A similar situation is observed in diesel fuels. In diesel fuel, Turkey again can be seen as the country with the highest tax rate among the whole world surpassing UK, its closest follower.

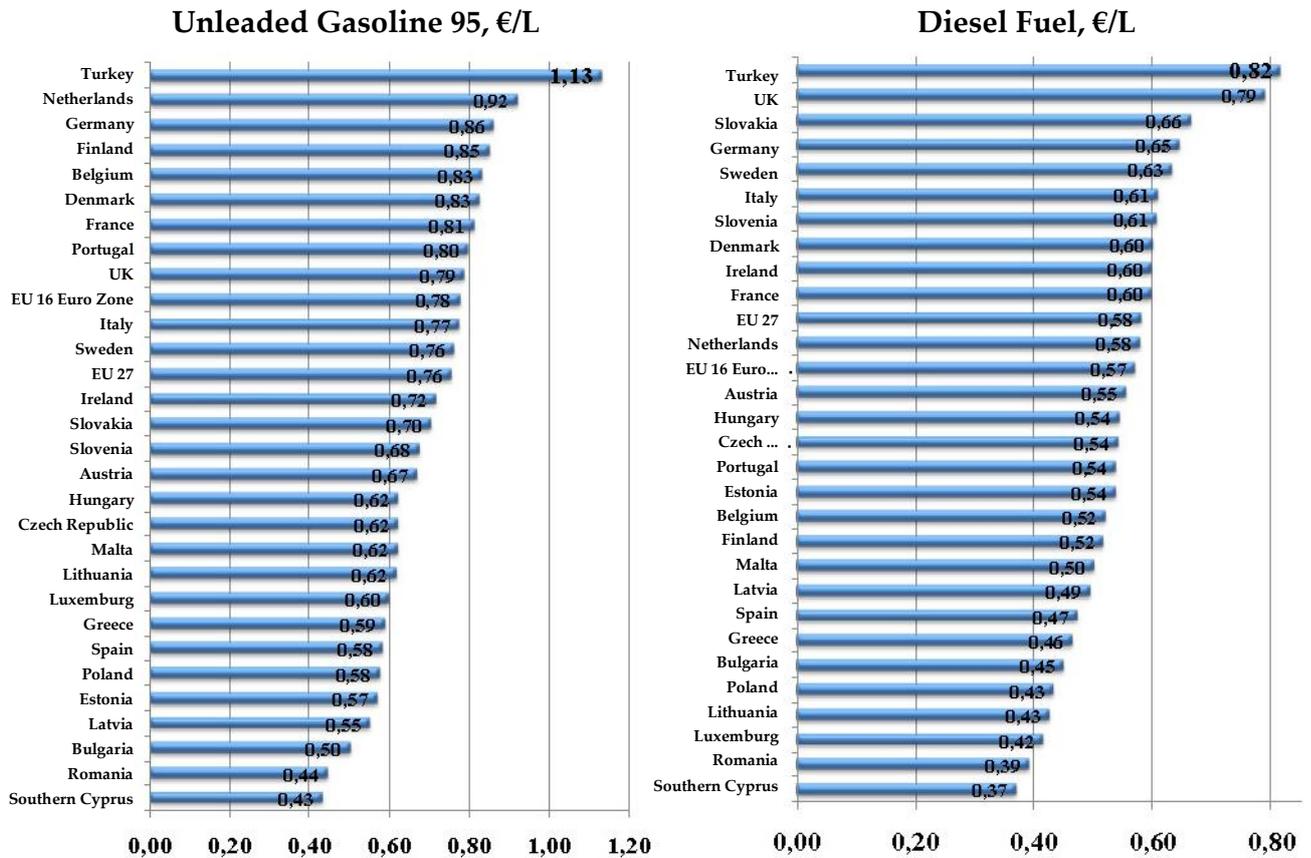


Figure 25: Indirect taxes in pump prices in Turkey and some other European countries.

(source : <http://ec.europa.eu> as of 31.12.2009)

The calorific value generated by energy products is a very important indicator in terms of energy efficiency. Tax charged per unit calorific value on an energy product indicates the country’s priorities on energy products. In these types of comparisons usually tax charge corresponding to 1000 kcal thermal value of an energy product is taken into consideration. Below, SCT charged for 1000 kcal thermal value of each energy product is compared in a graph. As the graph indicates, to get 1000 kcal of energy, consumers pay approximately 67 kuruş tax when using off-road diesel fuel, and pays 2 kuruş tax when they use coal to obtain the same amount of energy. This reveals a large imbalance between the product’s tax amount for each calorific value yielded. This amount is especially high for oil products.

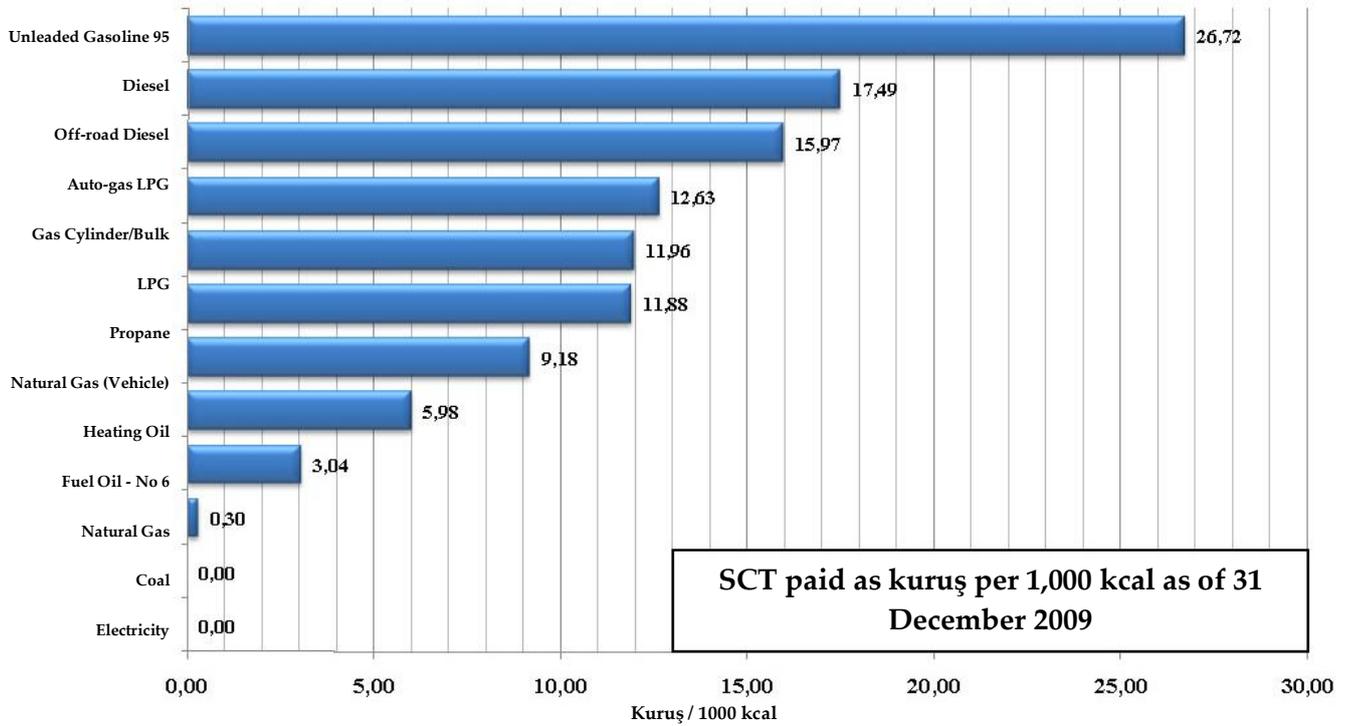
SCT per Net "1,000 kcal" of Energy Products (Kuruş)

Figure 26: SCT on various fuels used for obtaining 1000 kcal heat.

* Electricity price does not include SCT, however, includes energy fund, TRT fund and Municipality Consumption Tax.

As the graph above portrays, for the same calorific value, the SCT charge on gasoline is

- Twice the charge for diesel fuel
- Two and a half times the charge for LPG
- 90 times the charge for natural gas.

IV. IMPORTANT EVENTS IN THE INDUSTRY FOR THE YEAR 2009:

a) Competition Authority Ruling Restricting Group Exemption of Dealer Agreements to Five Years

On March 11, 2009 the Competition Authority has stated that contracts signed under usufruct and lease annotations shall be restricted to being effective for five years at most due to the claim that such contracts pressure dealers to extend contract durations. Through this decision the Competition Authority aims at providing for a more competitive market environment. It is certain that this decision will have major implications in the industry as it will be applied to

previously signed usufruct and lease annotation contracts which are still in effect and are deemed to be implemented retroactively.

The most important impact on the industry of this decision will be encountered in the adaptation period of large investments and contracts envisaged to last for a long term. Under the said decision, a contract, which has been executed in a pre-decision period through mutual consent of parties with a term greater than five years, must be reduced to five years in the light of the decision of the authority. Shortening of contract durations has led many to question the returns of their investments and financial supports they have provided envisaging that it would be used by distributors for a term greater than five years. Considering that the estimated number of contracts to be affected by this decision is approximately 7000, major problems are expected to erupt with distributor and dealer relationships. If those investments and financial supports envisaged to last for a duration more than five years are not recalled and/or refunded, a large number of cases are expected to be taken to the court.

b) EMRA Price Cap Implementation

On June 25, 2009, Energy Market Regulation Authority through a Board meeting has adopted a decision that mandated the application of a cap price calculated using a formula published for the use of *distributors and dealers* to set their *gasoline and diesel fuel* pump prices. In the cap price implementation, distributor and dealer expenses and profit margins were restricted by a cap price determined by the Authority rather overlooking the refinery prices and the costs of transport in Turkey, and basing and comparing it entirely on tax free values of gasoline and diesel fuel in the EU markets and effective exchange rates. Not having the impact it had foreseen, the practice has continued for two months from June 27 until August 27, 2009, and has adversely affected the environment of trust on the free market approach, which had taken five years to build for the oil industry.

c) Marker Practice in the Fuel Market and Activities Leading to Tax Revenue Loss

The definition of illicit fuel termed by the Petroleum Market Law as "*Fuel not containing national marker at the level specified by the Authority*" albeit being a determining proposition for the sector has demonstrated that in practice poses significant threats for the sector. Under this definition, a fuel, which is legally legitimate, may be considered as illegal simply as a result of technical and/or measurement errors made during inspection. Despite affirmative results obtained about the legibility of the marker level at the time of initial inspection, tests conducted a few months later may display variation due to technical and/or measurement reasons. This leads to two results taken from the same sample within different time dispersals exhibit variance and in effect lead to serious allegations on the judicial front. The fact that national marker related problems have been experienced nearly in all refineries and distributors is an important indication that illegal fuel definition based on the marker level remains valid yet an insufficient term in determining the legibility of the fuel. Indeed,

there seems to be a strong urge to reconsider an illicit fuel definition based solely on the national market level vis-à-vis the serious accusation and harms it may bring upon the industry.

On July 15 and December 31, 2009 SCT on certain fuels increased. This increase further widened the gap between charges on fuel and non-fuel products and led to a significant rise in off the books market activities which in effect reflects to the government as a significant loss in tax revenue.

Such illegal activities classified under “number 10 lub activities” had been considerably resolved after the readjustment of SCTs of fuel and non-fuel products in June 2008, however, due to the recent adjustment in the second half of 2009 has reemerged with even greater repercussions. Indeed, the notable decrease in consumption of one millions tons of off-road diesel fuel in 2009 strengthens the proposition that off the books activities or those leading to tax losses have relatively increased. Currently, our market observations indicate that sales of “number 10 lubs” constructs the greater portion of this problem. Evaluations on this matter are explained in more detail in the following section.

c.1) Abuse of Tax Differences on Fuel and Equivalent Products and Tax Losses Incurred

Blending of non-fuel products together with fuels and their use thereof under the title of “number 10 lub” as a substitute for fuel has become a very frequently observed problem in Turkey. In this field, two different types of activities lead to tax losses and unfair competition. The first one is the unauthorized introduction of a non-fuel product to the market to substitute for fuel to avoid tax/price differences and mixing of such products with fuel. And, the second one is the sales in the fuel and lubricant market of these waste products (lubricants, plant oils, solvents, etc.).

c.1.1) *Blending of non-fuel products with fuels and/or use thereof in place of fuel:*

The most precise example which may be cited for such activities involve sales made under the title of number 10 lub in the diesel fuel market. In these operations, waste lubricants (lubricants, vegetable oils) and heavy solvents are mixed with or used instead of base lubricants and formulations, while ethanol and other alcohols are mixed with or used instead of diesel fuel and fine solvents and, waste oils and black products are mixed with or used instead of gasoline.

Such tax evading practices constitute a direct point of breach. The SCT on off-road diesel fuel being 1.2345 TL /Lt and SCT on alternative substances especially lubricants treated as formulation or non-fuel product being 0.30 TL /Kg is regarded as the main cause for the sale of such unauthorized non-fuel products.

In fact, presently, these types of products generally named as “number 10 lub” are on sale at all industrial complexes, truck garages and along roads. Such substances are in wide use by vehicles like buses, trucks and vans. Considering the magnitude and their prevalence in market operations, it is observed that the size of this abuse is progressively increasing.

c.1.2) Entries of products like waste lubricants, waste vegetable oils and waste solvents, etc. into the fuel market through off the books activities and/or tax revenue loss:

Another entry made into the fuel market as non-fuel products leading to off the books activities, tax losses and unfair competition is accumulated through using waste lubricants and other waste materials. Approximately 200,000 tons of waste lubricants a year is missing from the records. Similarly, marine waste like slope, etc. and various solvents in significant amounts are also believed to enter the fuel market through such unauthorised procedures.

In summary, estimates made on this subject show that a minimum of 500,000 tons of imported lubricants with various customs codes (low SCT, non-fuel products), types of base oils and waste lubricants are either used in place of or commingled with diesel fuel. It is estimated that the tax loss caused by this quantity is above 600 million TL for the year 2009. Furthermore, sale of such type of substances as fuel leads to unfair competition and is detrimental to the environment and human health.

Furthermore, re-entry into the domestic market of SCT-free marine fuels and/or transit fuels is a separate and comprehensive subject with regard to illegal / off the books operations like fuel smuggling. This topic has been evaluated in length in our other publications named as ‘illicit and unrecorded fuels’.

c.2) Problems Encountered in Import Transactions, Other Technical and Operational Issues, Losses Carried on Country’s Economy and Unnecessary Financial Burdens

During the liberalization process initiated on 2005, significant affirming developments have occurred in the fuel and LPG markets. Currently , to further develop the free market structure and the liberalization process it is necessary to alleviate red-tape procedures in import transactions in order to create a more dynamic and competitive market environment. Considering that Turkey needs to import about 8 million tons of diesel fuel a year and that import formalities take approximately 13-18 days, there is a call for an enhanced bureaucratic systematic in terms of procedure duration and required formalities. Essentially, this point becomes even more pronounced in periods when oil prices fluctuate significantly. Thus, serious efforts are underway for improving this situation and upon its settlement a serious contribution will have been made to the country’s economy with the fuel sector acting in a more competitive structure.

d) Developments in Licensed Operations of Oil and LPG Market:

As of the end of 2009, 4 refineries, 54 distributors, 82 storage facilities and 12,702 fuel stations are operating with EMRA licenses in the oil market. While, in the Liquefied Petroleum Gas (LPG) market; 64 distributors, 82 storage facilities, 8,163 auto-gas stations and 10 LPG bottle manufacturers are operating with licenses from EMRA. Approximately 90% of licensed auto-gas dealerships are in fuel stations.

e) International Oil Markets

The drastic changes and trends observed in 2008 in crude oil prices in the international markets lost momentum leaving a more stabilized environment in 2009. Changes in crude oil per barrel price in recent years entered a steadier pattern as shown in the graph below.

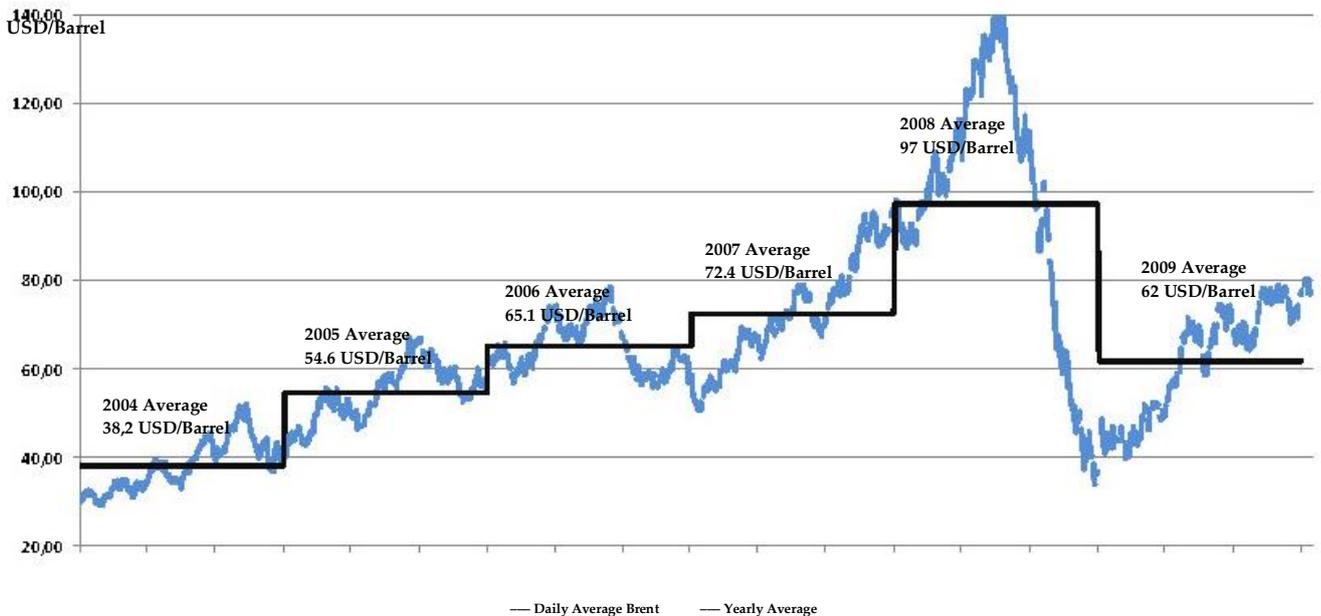


Figure 27: Changes in daily and yearly average Brent crude price per barrel (USD/Barrel).

V. PETDER ACTIVITIES AND SIGNIFICANT SECTORAL DEVELOPMENTS:

a) PETDER General Meeting:

At the General Meeting of Oil Industry Association (PETDER) held on October 1, 2009, new members of the Board of Directors were elected. The list of elected Board of Directors is given in the contacts and member details at the last section of this report.

b) TURKUAZ Petrol Ürünleri A.Ş. Joins Oil Industry Association as a Member :

TURKUAZ Petrol Ürünleri A.Ş., Zülfikarlar Group's enterprise in the energy sector, joined PETDER in 2009. With Turkuaz's membership to PETDER, the structure represented by Oil Industry Association has further expanded through the support of its members operating in the fuel lubricants and LPG markets. Oil Industry Association, with its 14 member firms represents a vital part of the lubricants, LPG and fuel sectors.

c) PETDER Waste Engine Oil Collection Activities:

PETDER, as the sole authorized body by the Ministry of Environment and the Forestry of the Republic of Turkey on the collection and disposal of waste engine lubricants this year **collected 18,000 tons of waste engine lubricants in its 15,000 trips from 4,826 different enterprises, covering a distance of one million kilometers.** Waste engine lubricants, because of their high energy value are used as an energy resource at special facilities licensed by the Ministry (as is the case in various EU countries). Starting from its inception, PETDER has allocated **11.5 million TL** funds for this project seeking to serve all enterprises which have waste engine lubricants free of charge.

Recycling of waste engine lubricants as energy or by transformation into base oil using advance technology and refining techniques is given priority and, as a side note, is also supported by the EU legislation. On the other hand, if the pollutant parameters in waste engine lubricants exceed specific levels, they must be destroyed as hazardous waste. An overall evaluation of this structure leads to three important questions in the management of lubricants;

- 1- How much of the lubricants offered to the market can be picked up under record after becoming waste?
- 2- What techniques can be used in the collection of waste lubricants such as it does not endanger the environment and/or human health?
- 3- In what way are such practices supported by total lifecycle analysis?

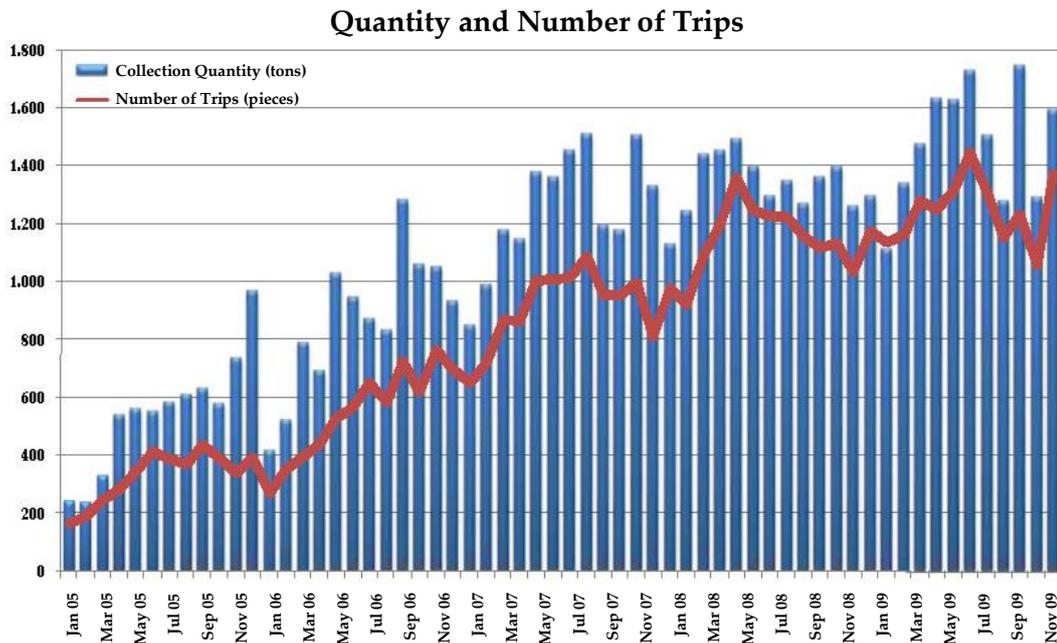


Figure 28: Quantity of collected waste lubricants (tons) from 2005 until 2009 and monthly change in number of trips

These three important elements, as in many waste management systems, are of great significance for waste lubricants collection. Graphs given below are important as they represent the general profile in Turkey and EU countries in terms of disposal/recycling processes of collected waste lubricants and collection efficiency of waste lubricants.

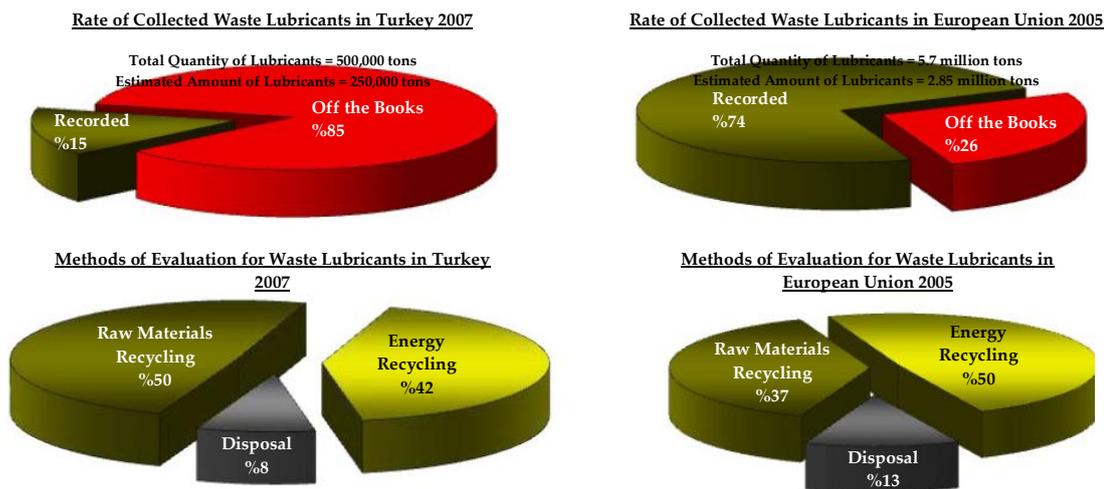


Figure 29: Waste lubricant collection percentages in Turkey and Europe and evaluation techniques Source: European Re-refining Industry section` 2008 Report, Republic of Turkey Ministry of the Environment and Forestry Waste Management Action Plan (2008-2012)

Evaluations made in EU countries indicate that there is no standard practice on the management of waste lubricants. Despite this, it is observed from EU sources that 63% of waste lubricants collected in European countries are recycled as energy. This ratio is 51% in Turkey according to the Ministry of the Environment and Forestry of the Republic of Turkey Waste Management Action Plan data.

Considering that approximately 500,000 tons of lubricants are consumed in our country per year, the estimated amount of waste lubricants are 250,000 tons. Of the total 34,280 tons of waste lubricants collected in 2008; 16,900 tons were recycled as product or energy in refineries and regeneration facilities, 17,380 tons in cement, lime, iron and steel and disposal facilities. The total quantity of waste lubricants placed in records in Turkey is 15% of the total estimated value. The whereabouts and situation of the remaining 85% of waste lubricants is either unknown or unrecorded. The average for EU member countries of the recorded amount is currently at about 26%.

The field data obtained over the last five years by Oil Industry Association in the project of collection of waste engine lubricants indicate that waste lubricants are mostly mixed with fuels at significant amounts. In fact, throughout 2009, despite all efforts made by our organisation the amount of waste engine lubricants placed under record has remained at about 18,000 tons. This shows that minimum 200,000 tons of waste lubricants are collected off the books and commingled with fuels. It is believed that this situation is mostly related to the excessive contraction in consumption of off-road diesel oil. It is also estimated that the loss of taxes revenue due to such unauthorized operations is above 300 million TL.

VI. SOURCES:

- Fuel data used in this report have been compiled from statements provided by 11 fuel distributors whose aggregate market share is calculated to be above 95 of the market and reported to the independent research organization PWC (Price Waterhouse Coopers) on voluntary participation basis. For data on fuel distributors who did not participate in this voluntary data formation system, calculation were made using data from previous periods obtained from the EMRA.
- For other data on the fuel and lubricants sector used in this report, EMRA and PIGM data were used as references. Data for the LPG sector, on the other hand, were obtained from EMRA LPG sector report and data published by Turkish LPG Association.
- Inflation, GNP, CPI, exchange rates, vehicle numbers and total vehicle park values were obtained from the data published by the Turkish Statistics Institute (TurkStat) and from the Central Bank's published values for the general public. Platts values were used as a source for crude oil prices.

PETDER

OIL INDUSTRY ASSOCIATION

Fuel and LPG Consumption between 2000-2009

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Unleaded 95 Octane	m3	2,014.354	2,305.525	2,160.712	2,260.772	2,436.466	2,607.834	2,884.939	3,047.316	2,602.498	2,589.832
Unleaded 97 and Higher Octane	m3	0	0	0	16.959	285.489	262.218	123.878	20.180	310.926	294.493
Super/Additivated Unleaded	m3	1,599.493	1,176.463	1,906.795	1,552.788	1,005.699	625.519	366.890	209.624	110.902	57.709
Gasolines Total	m3	3,613.846	3,481.988	4,067.507	3,830.519	3,727.653	3,495.570	3,375.707	3,277.120	2,959.361	2,942.034
Kerosene	m3	51.353	41.216	37.430	47.977	41.118	34.792	26.077	18.176	13.624	11.171
Off-road Diesel	m3	9,691.472	9,963.639	11,234.997	11,504.277	12,445.391	12,291.514	12,588.855	12,624.816	13,161.773	11,919.770
Diesel (Low Sulfur)	m3	0	0	0	0	248.634	783.791	1,589.643	2,704.326	3,415.699	4,007.423
Total Diesels	m3	9,691.472	9,963.639	11,234.997	11,504.277	12,694.025	13,075.305	14,178.498	15,329.142	16,577.472	15,927.193
White Products Total	m3	13,356.671	13,486.844	15,339.934	15,382.773	16,462.796	16,605.667	17,580.282	18,624.438	19,615.422	18,880.398
Unleaded 95	ton	1,561.124	1,786.782	1,674.552	1,752.098	1,888.261	2,021.071	2,235.828	2,361.670	2,016.936	2,007.120
Unleaded 98	ton	0	0	0	13,144	221,254	203,219	96,005	15,640	240,968	228,232
LRP Additivated Unleaded	ton	1,239.607	911.759	1,477.766	1,203.411	779.416	484.777	284.340	162.459	85.949	44.724
Gasolines Total	ton	2,800.731	2,698.541	3,152.318	2,968.652	2,888.931	2,709.067	2,616.173	2,539.768	2,343.853	2,280.076
Kerosene	ton	41.082	32.973	29.944	38.382	32.894	27.834	20.862	14.541	10.889	8.937
Diesel	ton	8,189.294	8,419.275	9,493.572	9,721.114	10,516.355	10,386.329	10,637.582	10,667.970	11,121.698	10,072.206
Diesel (Low Sulfur)	ton	0	0	0	0	210.096	662.304	1,343.248	2,285.155	2,886.266	3,386.272
Diesels Total	ton	8,189.294	8,419.275	9,493.572	9,721.114	10,726.451	11,048.633	11,980.831	12,953.125	14,007.964	13,458.478
White Products Total	ton	11,031.107	11,150.789	12,675.834	12,728.148	13,648.277	13,785.533	14,617.865	15,507.434	16,362.716	15,747.491
Heating Oil	ton	1,309.576	1,397.577	987.773	951.716	720.482	612.175	482.942	390.777	384.736	320.531
Fuel Oil No: 6	ton	3,813.166	2,714.688	3,888.676	3,784.642	3,746.051	3,399.622	2,461.617	2,163.418	2,373.363	1,596.687
Black Products Total	ton	5,122.742	4,112.265	4,876.449	4,736.359	4,466.533	4,011.797	2,944.559	2,554.195	2,758.099	1,917.218
Total Fuels	ton	16,153.849	15,263.054	17,552.283	17,464.507	18,114.810	17,797.330	17,562.424	18,061.629	19,120.815	17,664.709
LPG Bottled	ton	2,133.831	1,810.341	1,724.805	1,801.825	1,665.167	1,557.212	1,491.580	1,302.434	1,177.269	1,109.609
LPG Bulk	ton	1,067.348	794.052	713.354	646.552	454.066	383.148	475.454	216.470	171.528	190.393
LPG Auto-gas	ton	1,280.331	1,230.330	1,136.025	1,147.374	1,640.766	1,751.838	1,550.605	2,006.263	2,111.557	2,299.280
LPG (gas cylinder, bulk, auto-gas)*	ton	4,481.510	3,834.723	3,574.184	3,595.751	3,759.999	3,692.198	3,517.639	3,525.167	3,460.354	3,599.282
Total Automotive (White Product+Auto-gas)	ton	12,918.525	13,336.964	14,238.463	13,855.918	15,005.116	15,286.964	16,143.522	17,513.697	17,476.840	18,037.834

Fuel and LPG Consumption between 2000-2009

* Gas bottled, bulk, and auto-gas values were obtained from the Energy Market Regulatory Authority's report. Data related to 2009 are estimations.

Figure 29: Fuel and LPG consumption in years 2000- 2009.

PETDER

OIL INDUSTRY ASSOCIATION

VII. CONTACT AND MEMBER INFORMATION:

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