

Republika e Kosovës Republika Kosova - Republic of Kosovo *Qeveria - Vlada - Government* Ministria e Zhvillimit Ekonomik Ministarstvo Ekonomskog Razvoja - Ministry of Economic Development

BALANCA VJETORE E ENERGJISË E REPUBLIKËS SË KOSOVËS PËR VITIN 2013

GODIŠNJI ENERGETSKI BALANS REPUBLIKE KOSOVA ZA 2013. GODINU

ANNUAL ENERGY BALANCE OF REPUBLIC OF KOSOVO FOR THE YEAR 2013

Prishtinë, 2014



Republika e Kosovës Republika Kosova - Republic of Kosovo *Qeveria - Vlada - Government* Ministria e Zhvillimit Ekonomik Ministarstvo Ekonomskog Razvoja - Ministry of Economic Development

ANNUAL ENERGY BALANCE OF REPUBLIC OF KOSOVO FOR THE YEAR 2013

Prishtina, 2014

This document was prepared by the MED Division of Energy Policy, with the support and in close cooperation with the entities outlined in the Administrative Instruction No. 07/2011 on Energy Balance Rules.

Contents

Abbreviations	
Executive Summary	
1. Annual Energy Balance in 2012	1
1.1. Primary energy source	1
1.1.1. Coal	2
1.1.2. Petroleum products	3
1.1.3. Biomass (Firewood)	4
1.1.4. Electricity	4
1.1.5. Hydro energy	4
1.1.6. Wind energy	4
1.1.7. Solar energy	4
1.1.8. Biofuels	4
1.2. Final energy consumption	5
1.2.1. Final coal consumption	7
1.2.2. Final consumption of petroleum products	8
1.2.3 Final electricity consumption	9
1.2.4. Final consumption of gained heat	10
1.3. Energy consumption in the industry sector	10
1.3.1. Consumption of energy sources in the industry sector	10
1.3.2. Coal consumption in the industry sector	11
1.3.3. Consumption of petroleum products in the industry sector	12
1.3.4 Electricity consumption in the industry sector	13
1.3.5 Proportion of industry branches in energy consumption	14
1.4. Energy consumption in the household sector	15
1.4.1. Consumption of all energy products in the household sector	15
1.4.2. Coal consumption in the household sector	17
1.4.3. Petroleum product consumption in the household sector	
1.5. Energy consumption in the services sector	19
1.5.1. Consumption of all energy products in the services sector	
1.5.2. Coal consumption in the services sector	
1.5.3. Consumption of petroleum products in the services sector	
1.6. Energy consumption in the transport sector	21

1.6.1. Consumption of all energy products in the transport sector	21
1.7. Energy consumption in the agricultural sector	22
1.7.1. Consumption of all energy sources in the agricultural sector	22
1.7.2. Coal consumption in the agriculture sector	23
1.7.3. Consumption of petroleum products in the agriculture sector	24
1.8. Energy demand coverage in all sectors	25
1.8.1. Coal (lignite) supply	25
1.8.2. Electricity supply	25
1.8.3. Petroleum product supply	26
1.9. Energy indicators	26
1.10. Environmental pollution	27
1.10.1. Impact of the thermal power plants on environmental pollution	27
APPENDIXES	28
Appendix 1. Features of the energy system in Kosovo	.29
Appendix 2. Features of energy resources, and unit conversion	30
Unit Conversion	30
Appendix 3. Annual energy balance of the Republic of Kosovo for 2013	.323

Abbreviations

СО	Carbon monoxide
CO2	Carbon dioxide
CRES	Center for renewable energy and saving, Athens, Greece
EnC	Energy Community
ERO	Energy Regulatory Office
EUROSTAT	European Community Statistics Office
GDP	Gross Domestic Product
GW	Giga Watt
GWh	Giga Watt/Hour
HPP	Hydro Power Plant
IEA	International Energy Agency
KC	Kosovo Customs
KEDS	Kosovo Electricity Distribution and Supply Company
KEK J.S.C.	Kosovo Energy Corporation
KFA	Kosovo Forest Agency
KOSTT J.S.C.	Kosovo Transmission, System and Market Operator
KSA	Kosovo Statistics Agency
Ktoe	Kilo ton oil equivalent
LPG	Liquefied Petroleum Gas
MAFRD	Ministry of Agriculture, Forestry and Rural Development
MED	Ministry of Economic Development
MW	Mega Watt
MWh	Mega Watt/Hour
NOX	Nitrogen oxides - NO and NO2
REKOS 2011	Census of Population, Households and Residences in Kosovo
RES	Renewable Energy Sources
SO2	Sulfur dioxide
TPP	Thermal Power Plant
VOC	Volatile organic compound

Executive Summary

The 2013 Annual Energy Balance was prepared by the Division for Energy Policy, part of the Department of Energy, in the Ministry of Economic Development.

The 2013 Annual Energy Balance in the Republic of Kosovo was compiled in accordance with the requirements set forth in the Law on Energy No. 03/L-184 and the Administrative Instruction No. 07/2011 on Energy Balance rules.

This document depicts physical energy flows of all types and sources used in Kosovo during 2013.

Data from the following entities were collected:

- Kosovo Agency of Statistics demographic and social data, data on imports and exports of all fuels;
- Kosovo Energy Corporation (KEK J.S.C) data on coal (production, supply and stock), and data on electricity consumption;
- Kosovo Transmission, System and Market Operator (KOSTT J.S.C.) periodic monthly and annual data on electricity balance;
- Kosova Coal J.S.C. data on wet and dry coal extracted from Kosovo's open cast mines;
- District heating companies data on energy flows in district heating companies;
- MTI processed data on petroleum products.

In this document, the analysis of energy consumption is based on surveys and studies conducted. The extrapolation of such data was based on relevant development indicators, such as demographic, social and economic indicators.

Data was collected and processed, systemized and presented in line with the Administrative Instruction No. 07/2011 on Energy Balance rules.

1. Annual Energy Balance in 2013

Key sections of the Annual Energy Balance for 2013 cover primary sources, including generation, production, exploitation, import, export and stock, and consumption of such energy products. These two sections will be analyzed below.

1.1. Primary energy source

The structure of primary energy consumed in Kosovo in 2013 does not differ to that of 2012. It comprises coal, petroleum products (gasoline, diesel, heavy oil, kerosene and liquid petroleum gas – LPG), biomass, electricity, hydro-energy, wind energy, solar energy and biofuel. Electricity is only treated from the export and import perspective. This approach is based on the EUROSTAT methodology.

As noted in Table 1, the overall (gross) amount of energy available for utilization (consumption) in 2013 was 2392.20 ktoe. In comparison to 2012, there was an increase of 2%.

Energy sources	2012	2013
Coal	1528.10	1552.16
Petroleum products	560.65	579.32
Biomass	247.49	247.65
Hydro energy	8.22	12.32
Solar energy	0.69	0.76
Wind energy	0.00	0.00
Biofuel	0.00	0.00
Total	2345.15	2392.20

Table 1. Overview of the amount of energy available by primary energy source (product) (ktoe)

As made clear by Table 1, the amount of available coal has marked an increase in comparison to 2012, by 1.6%, and the amount of available petroleum products has marked an increase in comparison to 2012, for 3.3%.

Data on the amount of available logwood (biomass) energy for 2013 is based on the results of the biomass study commissioned by the Energy Community and implemented by CRES, in 2011, extrapolated based on the increase of the number of households and GDP for 2013. This is based on the fact that logwood is mostly utilized for heating purposes in the household sector, hence, the increase of the number of households also increases the space to be heated, namely proportional consumption growth in this product.



Figure 1. Proportion of available primary sources (%)

1.1.1. Coal

The amount of coal available in 2013 was 1552.16 ktoe. Table 2 presents data on the amount of energy available from coal.

Coal	2012	2013
Anthracite	23.05	0.00
Bitumen coal and other coal	15.77	10.26
Coal stones for coke	0.00	0.00
Lignite	1488.46	1541.38
Coke and semi-coke	0.42	0.07
Coal gas, water gas, etc.	0.00	0.00
Terpentine coke from tar	0.00	0.00
Brown coal pellet	0.00	0.02
Tar	0.00	0.00
Peat	0.40	0.44
Total Coal	1528.10	1552.16

Table 2. Overview of the amount of coal available as a primary source (ktoe)





Figure 2 shows that lignite was the predominant product, taking 99.3% of the total coal available as a primary source, followed by bitumen coal with 0.7%. Kosovo possesses only lignite reserves, while other coal types are not available. The demand for other types of coal is met through imports.

1.1.2. Petroleum products

Kosovo doesn't have petroleum extraction or gross unprocessed petroleum refinement capacities. All petroleum product demand is covered through import. Import of petroleum products for 2013 reached 579.32 ktoe. In comparison to 2012, there was an increase of 3.3%. Table 3 presents data on amounts of energy available from petroleum products.

Petroleum products	2012	2013
Gasoline	71.51	66.77
Gasoil	0.00	0.00
Kerosene	0.00	0.00
Aviation kerosene (Jet fuel)	14.29	14.99
Petroleum oil/heavy duty oil	46.58	36.08
Diesel	307.84	317.94
LPG	37.53	39.68
Petroleum coke	43.68	61.93
Produkte tjera nafte	0.00	0.00
Other petroleum products	0.00	0.00
Bitumen	34.00	37.52
Lubrifier oils	5.22	4.41
Total	560.65	579.32

Table 3. Overview of the amount of petroleum products (ktoe)



Figura 3. Proportion of petroleum products as available primary energy sources (%)

Figure 3 shows that in 2013 diesel had the highest percentage of all petroleum products. Diesel takes 54.9% of the overall amount of available petroleum products followed by gasoline with 11.5%, diesel coke 10.7%, LPG with 6.8%, bitumen 6.5%,, heavy oil 6.2%, etc. 7.79%, LPG 6.69%, etc. noteworthy, this year there was no available gasoil, explained by the fact the micro-refineries that used this product as an input for the previous years have not operated in 2012.

1.1.3. Biomass (Firewood)

The amount of firewood consumed during 2013 is assumed to be 247,65 ktoe. In comparison to 2012, there is an increase of 0.06%, which corresponds with the increased number of households.

Basic data on logwood consumption were taken from the study on biomass consumption "2011 Study on biomass consumption for energy purposes in the Energy Community", commissioned by the Energy Community and implemented by CRES.

1.1.4. Electricity

Based on the EUROSTAT methodology on presentation of energy balances, electricity is treated as primary energy only in consideration of the imported and exported energy amounts. The net import of such energy for 2013 was -28.82 ktoe (import-export), which means that exports were higher than imports this year.

1.1.5. Hydro energy

Data on hydro energy is provided by KEDS and KOSTT. These figures are based on the amount of electricity produced in hydro power plants HPP Ujmani, SHPP Lumbardhi, SHPP Radavci, SHPP Dikanci and SHPP Burimi. The amount of hydro energy produced in hydro power plants during 2013 was 12.32 ktoe.

1.1.6. Wind energy

In 2013 no wind-powered electricity was produced.

1.1.7. Solar energy

Data on solar energy for 2013 were estimated based on the trend of developments of prior years, and is estimated to be 0.76 ktoe.

1.1.8. Biofuels

In 2012, no biofuel imports were noted. Also, there is no evidence of generation of such energy product.

1.2. Final energy consumption

Data on biomass consumption is taken from the results of the survey on biomass consumption in the household, services and industry sectors, in a project commissioned by the European Community in 2011, while the 2012 consumption was extrapolated for the increased number of households (by 2%) and GDP (2.4%).3. Data on energy consumed during 20131 is based on research and surveys conducted in all economic sectors. Such research was conducted during last four years (2009, 2010, 2011 and 2012), while estimates are based on the trend analysis of the last three years, in conjunction with appropriate indicators that have direct impact on consumption, such as economic, demographic and other indicators. Biomass consumption data are also collected from surveys on biomass consumption in households, services, agricultural and industry sectors, a project commissioned by the Energy Community in 2011, while the 2013 consumption was extrapolated for an 0.68% annual growth in households, and the GDP increase of 3.2%.

Table 4 presents the energy consumption amounts divided by sectors.

Economic sector	2012	2013
Industry sector	272.98	266.63
Household sector	473.73	495.52
Services sector	117.09	118.79
Agricultural sector	19.85	29.34
Transport sector	342.65	328.52
Total	1226.30	1238.80

Table 4. Overview of proportions of all sectors in the final energy consumption (ktoe)

Table 4 presents final energy consumption for 2013, which amounted to 1238.80 ktoe, thus marking a decrease by 1% in comparison to 2012. The sector with the highest energy consumption in 2013 is the household sector, which spent 495.52, or 40% of the overall consumption. The second sector is the transport sector, with an overall amount of 328.52 ktoe, or 26.5% of the total consumption. The industry sector consumed 266.63 ktoe of energy, or 21.5%. The amount of energy consumed by the services sector is 118.79 ktoe, or 9.6%. The sector that consumed least energy was agricultural sector with 29.34 ktoe, or 2.4% of the overall consumption.

[&]quot;Energy Consumption in Kosovo", Riinvest Institute 2009,

[&]quot;Study on distribution of energy consumption in the industry sector, and potentials for efficiency improvement", MPR GROUP, 2010,

[&]quot;Study on distribution of energy consumption in the household sector, and potentials for efficiency improvement", "Intech" Institute, 2011,

[&]quot;Study on distribution of energy consumption in the service sector", "Links 4" Bureau, 2012,

[&]quot;Study on biomass consumption for energy purposes in the Energy Community", CRES, 2011;

[&]quot;Study on energy consumption in agriculture", "Intech", 2013



Figure 4. Proportion of economic sectors' consumption of energy (%)

Energy consumption for non-energy purposes in 2013 was 42.37 ktoe. Peat is the only type of coal consumed for non-energy purposes in the chemical industry, totaling 0.44 ktoe. Petroleum sub-products of bitumen and lubricant oil were also used for non-energy purposes in 2013, in the amount of 41.93 ktoe. Below is the final energy consumption for non-energy purposes. In comparison to 2012, there is an increase of energy consumption for non-energy purposes.

Economic sector	2012	2013
Chemical industry	0.40	0.44
Other sectors	39.22	41.93
Total	39.62	42.37

Table 5. Final consumption for non-energy purposes (ktoe)

Table 6 presents the state and amounts of final energy consumption by energy product type.

Source	2012	2013
Coal	68.58	55.95
Petroleum products	561.18	573.58
Biomass	247.50	247.65
Biofuels	0.00	0.00
Electricity	384.54	399.57
Solar energy	0.69	0.76
Gained heating	3.44	3.67
Total	1265.92	1281.17
0.1%_0.3%_4.4%	Coal	
	Petrol	eum products
31.2%	Bioma	SS
44.8%	Biofue	ls

Table 6 . Overview of final consumption of all energy sources (ktoe)



Electricity

Solar energy
Gained heat

0%

19 39

The most used energy source in 2013 were petroleum products, with 573.58 ktoe or 44.8% of the total consumption of energy products. Electricity ranks second most consumed energy product, with 399.57 ktoe or 31.2% of the total consumption. Biomass (mostly firewood) consumption reached 247.65 ktoe, making for 19.3% of the overall consumption. Coal covered 55.95 ktoe or 4.4% of the overall consumption. Derived heating amounted to 3.67 ktoe or 0.1% of the total energy consumed.

1.2.1. Final coal consumption

Final consumption of coal types is presented in the following table:

Coal	2012	2013
Anthracite	23.05	0.00
Bitumen and other Coal	15.77	10.26
Coke coal	0.00	0.00
Brown Lignite/Coal	28.94	36.17
Coke and semi-coke	0.42	0.07
Coal gas, gas, etc.	0.00	0.00
Turpentine coke from soot	0.00	0.00
Brown coal briquette	0.00	0.02
Soot	0.00	0.00
Peat	0.40	0.44
Total	68.58	46.95

Table 7. Overview of the final coal consumption (ktoe)



Figure 6. Overview of coal consumption (%)

Table 7 and Figure 6 show that lignite is the type of coal consumed most in 2013, covering 36.17 ktoe or 77% of overall consumption. The amount of bituminous coal consumed was 10.26 ktoe, or 21.9% of total consumption. Peat was consumed at the amount of 0.44 ktoe, or 0.9%, but this amount of peat was consumed for non-energy purposes. Coke and semi-coke are consumed at the amount of 0.07 ktoe, or 0.1% of the overall consumption. The decrease in coal consumption compared to 2012 is explained with the decrease of anthracite and bituminous imported.

1.2.2. Final consumption of petroleum products

Below is the final consumption of all petroleum products:

Petroleum products	2012	2013
Gasoline	71.51	66.77
Gasoil	0.00	0.00
Kerosene	0.00	0.00
Kerosene (Jet fuel)	14.29	14.99
Heavy oil/heavy duty oil	36.32	27.25
Diesel	311.73	318.97
LPG	44.44	41.68
Petroleum coke	43.68	61.93
Other petroleum products	0.00	0.00
Petroleum residues	0	0.00
Bitumen	34.00	37.52
Lubrifier oils	5.22	4.41
Total	561.18	573.52

Table 8. Overview of the final consumption of petroleum products (ktoe)



Figure 7. Overview of petroleum product consumption (%)

As depicted in Table 8, diesel is the most consumed sub-product in 2013, amounting to 318.97 ktoe or 55.6% of the of the overall petroleum product consumption, followed by gasoline with 66.77 ktoe, or 11.6%, petroleum coke with 61.95 ktoe, or 10.8%, LPG with 41.68 ktoe, or 7.3%, bitumen with 37.52 ktoe or 6.5%, however the amount of bitumen is used for non-energy purposes (see Table 7), heavy oil with 27.25 ktoe or 4.8%, and kerosene (jet fuel) with 14.99 ktoe or 2.6% of the overall consumption of petroleum products.

1.2.3 Final electricity consumption

In 2013, the electricity consumption reached 399.57 ktoe, and in comparison to 2012, there was an increase of 3.9%. The following table presents electricity consumption by all economic sectors.

Sector	2012	2013
Industry	107.92	108.00
Transport	0.00	0.00
Households	210.15	229.36
Agriculture	6.66	1.21
Services	59.81	61.00
Total	384.54	399.57

Table 9. Overview of electricity consumption (ktoe)



Figure 8. Electricity distribution by economic sectors (%)

As presented in Table 9, the household sector is the sector with the highest electricity consumption, with 229.36 ktoe, or 57.4% of the overall electricity consumption. The second highest electricity consumer is the industry sector wit 108 ktoe, or 27% of the overall electricity used, followed by the services sector with 61 ktoe or 15.3% and the agricultural sector with 1.21 ktoe or 0.3% of the overall electricity consumption.

1.2.4. Final consumption of gained heat

Final consumption of gained heat in 2013 was 3.67 ktoe, marking an increase of 6.7% compared to 2012. The household sector is the sector with the highest consumption, accounting for 2.38 ktoe or 65% of the overall consumption of gained heat, followed by the services sector, which consumes 1.28 ktoe or 35%.

Sector	2012	2013
Industry	0.00	0.00
Transport	0.00	0.00
Households	2.24	2.38
Agriculture	0.00	0.00
Services	1.21	1.28
Total	3.44	3.67

Table 10. Overview of the consumption of gained heat by all economic sectors, in ktoe

1.3. Energy consumption in the industry sector

1.3.1. Consumption of energy sources in the industry sector

Energy consumption (consumption of all energy products), in the industry sector in 2013 amounted to 266.63 ktoe, marking a decrease of -2.3% in comparison to 2012.

Energy product	2012	2013
Coal	49.36	30.47
Petroleum products	104.41	116.51
Biomass	11.28	11.64
Electricity	107.92	108.00
Total	272.98	266.63

Table 11. Overview of the consumption of all energy sources in the industry sector (ktoe)

The products consumed most by the industry sector are petroleum products, with 116.51 ktoe, or 43.7%, followed by electricity with 108 ktoe or 40.5%, coal with 30.47 ktoe or 11.4%, and biomass with 11.64 ktoe or 4.4% of the overall consumption of energy by the industry sector.



Figure 9. Overview of the consumption of all energy sources by the industry sector (%)

1.3.2. Coal consumption in the industry sector

Table 12 represents an overview of the consumption of all coal types in the industry sector. In 2013, lignite participated with 20.22 ktoe, or 66.4%, bitumen coal and other coals with 10.18 ktoe, or 33.4%, and coke and semi-coke with 0.07 ktoe or 0.2%.

The following table represents consumption of each type of coal by the industry sector.

Coal	2012	2013
Anthracite	23.05	0.00
Bitumen and other Coal	15.65	10.18
Coke coal	0.00	0.00
Lignite	10.25	20.22
Coke and semi-coke	0.42	0.07
Coal gas, gas, etc.	0.00	0.00
Turpentine coke from soot	0.00	0.00
Brown coal briquette	0.00	0.00
Soot	0.00	0.00
Peat	0.00	0.00
Total	49.36	30.47

Table 12. Overview of the consumption of all coal types by the industry sector (ktoe)



Figure 10. Overview of the consumption of all coal types by the industry sector (%)

1.3.3. Consumption of petroleum products in the industry sector

Table 13 presents consumption of petroleum products in the industry sector in 2013, lead by petroleum coke with 53.2%, followed by diesel with 21.7%, heavy oil with 16.4%, LPG with 8.3% and gasoline with 0.5% of the total amount of petroleum products consumed by the industry sector.

Petroleum products	2012	2013
Gasoline	0.55	0.53
Gasoil	0.00	0.00
Kerosene	0.00	0.00
Kerosene (Jet fuel)	0.00	0.00
Petroleum oil/heavy duty oil	25.00	19.07
Diesel	25.11	25.26
LPG	10.07	9.72
Petroleum coke	43.68	61.93
Other petroleum products	0.00	0.00
Petroleum residues	0.00	0.00
Bitumen	0.00	0.00
Total	104.41	116.51

Table 13. Overview of the consumption of petroleum products in the industry sector (ktoe)



Figure 11. Petroleum products consumed by the industry sector (%)

The industry sector comprises the following industrial branches: steel and iron industry, non-ferric metal industry, chemical industry, glass, ceramics and construction material industry, ore extraction industry, food, beverages and tobacco industry, textile, clothes and leather industry, paper and printing industry, engineering and other non-metallic industries.

1.3.4 Electricity consumption in the industry sector

Total consumption of electricity in the industry sector for 2013 was 108 ktoe. The iron and steel industry represent the branch with the highest electricity consumption with 43.96 ktoe, or 40.7% of the overall electricity consumption by the industry sector, followed by food, beverages and tobacco industry with 40.40 ktoe or 37.4%, other industries with 15.26 ktoe or 14.1%, glass, ceramics and construction material industry with 5.28 ktoe or 4.9% and non-ferric metal industry with 1.39 ktoe or 1.3%.

Industry subsector	2012	2013
Coal and steel industry	43.93	43.96
Industry of non-ferric metals	1.39	1.40
Chemical industry	0.24	0.24
Glass, ceramic and construction material industries	5.28	5.28
Ore extraction industry	1.20	1.20
Food, drink and tobacco industry	40.37	40.40
Textile, leather and clothes industry	0.09	0.09
Paper and stamping industry	0.16	0.16
Engineering and metallic industries	0.01	0.01
Other industries	15.24	15.26
Total	107.92	108.00

Table 14. Overview of electricity consumption in the industry sector (ktoe)



Figure 12. Proportion of electricity consumed by branches of the industry sector (%)

1.3.5 Proportion of industry branches in energy consumption

The iron and steel industry is the branch consuming most energy in the industry sector, with 77.66 ktoe or 29.1% of the overall energy consumption in the industry sector. This industry is followed by the glass, ceramics and construction material industry, with 67.67 ktoe, or 25.4% of the total energy consumed by the industry sector. A large energy consumer is also the food, beverage and tobacco industry with 55.98 ktoe or 21% of the overall energy consumed by the industry sector. Other industies have consumed 36.06 ktoe, or 13.5% of the total energy consumption. The method of assessment is based on surveys made in 2009 and 2010, based on shares of branches in the total energy products used by the sector. It is worth mentioning that a new energy consumption study is required in this sector.

Industry branch	2012	2013
Coal and steel industry	85.31	77.66
Industry of non-ferric metals	37.72	25.55
Chemical industry	1.56	1.46
Glass, ceramic and construction material industries	55.64	67.67
Ore extraction industry	2.12	1.90
Food, drink and tobacco industry	58.21	55.98
Textile, leather and clothes industry	0.13	0.09
Paper and stamping industry	0.24	0.25
Engineering and metallic industries	0.01	0.01
Other industries	32.02	36.06
Total	272.98	266.63

Table 15. Overview of the total energy consumption by industry subsectors (ktoe)



Figure 13. Overview of energy consumption by industry subsectors (%)

1.4. Energy consumption in the household sector

1.4.1. Consumption of all energy products in the household sector

The energy consumed by the household sector is used for heating of spaced, air conditioning, sanitary water heating, cooking, lighting and use of electrical appliances for individual and family needs.

Energy consumption in the household sector in 2013 was 495.52 ktoe, marking an increase of 4.6% in energy consumption, in comparison to 2012.

Source	2012	2013
Coal	16.10	18.24
Petroleum products	17.79	16.51
Biomass	227.25	228.80
Electricity	210.15	229.36
Solar energy	0.21	0.23
Gained heat	2.24	2.38
Total	473.73	495.52

Table 16. Overview of the consumption of all energy sources in the household sector (ktoe)



Figura 14. Figure 14. Overview of the consumption of all energy sources by the household sector (%)

The most consumed energy product in the household sector in 2013 was electricity, with a consumption of 229.36 ktoe or 46.3% of the overall energy consumption in this sector. Biomass follows electricity with 228.80 ktoe or 46.2% of the total consumption. The energy generated by coal was 18.24 ktoe or 3.7% of the total consumption. Petroleum products were consumed at a rate of 16.51 ktoe, which means 3.3% of the total consumption. Gained heat figures reached 2.38 or 0.5% of the total energy consumption. The low proportion of gained heating in the overall energy consumption by the household sector is related with:

- Collective reductions for heating company consumers, especially by District Heating Company Termokos from Prishtina, as a measure for consumers that have failed to pay for their heating, and
- Lack of combustion fuels (heavy duty oil).

Therefore, there was an imposed reduction of gained heat energy consumption.

1.4.2. Coal consumption in the household sector

Table 17 shows that lignite is the main type of coal consumed by the household sector, reaching 18.22 ktoe, or 99.9%, followed by brown coal briquette with 0.02 ktoe, or 0.1% of the total coal consumption.

Table 17. Overview of the consumption types of coal in the household sector, expressed in

ktoe

Coal	2012	2013
Anthracite	0.00	0.00
Bitumen and other Coal	0.00	0.00
Coke coal	0.00	0.00
Brown Lignite/Coal	16.10	18.22
Coke and semi-coke	0.00	0.00
Coal gas, gas, etc.	0.00	0.00
Turpentine coke from soot	0.00	0.00
Brown coal briquette	0.00	0.02
Soot	0.00	0.00
Peat	0.00	0.00
Total	16 10	18 24



Figure 15. Overview of the consumption of all coal types in the household sector (%)

Peat

One must underline that we have only used administrative records of KEK, Coal Division, and there were no estimates of coal consumption from private mines, as done in the past years.

1.4.3. Petroleum product consumption in the household sector

Table 18 presents the state of consumption of petroleum products in the household sector. LPG is the energy product of all petroleum products consumed most by households, with 8.94 ktoe or 54.2% of the overall consumption, followed by diesel with 4.36 ktoe or 26.4% and gasoline with 3.20 ktoe or 19.4%.

Table 18. Overview of the consumption of all petroleum products in the household sector (ktoe)

Petroleum products	2012	2013
Gasoline	3.43	3.20
Gasoil	0.00	0.00
Kerosene	0.00	0.00
Kerosene (Jet fuel)	0.00	0.00
Fuel oil/heavy oil	0.00	0.00
Diesel	4.34	4.36
LPG	10.02	8.94
Petroleum coke	0.00	0.00
Other petroleum products	0.00	0.00
Petroleum remnants	0.00	0.00
Bitumen	0.00	0.00
Total	17.79	16.51



Figure 16. Overview of all petroleum products consumed in the household sector (%)

1.5. Energy consumption in the services sector

1.5.1. Consumption of all energy products in the services sector

Similar to the household sector, in the services sector energy is used mainly for heating purposes, air conditioning, water heating, cooking, lighting, and utilization of energy equipment in private and public facilities.

During 2013, services sector consumed a total of 118.79 toe. In comparison to 2012, there was an increase of 1.5%.

The services sector is divided in two main sub-sectors: public sub-sector and private sub-sector. The service sector includes public administration, public and private healthcare services, public and private education facilities, hotelier and touristic services, consultancies, cultural and sports facilities, etc.

Table 19. Overview of the consumption of all energy products in the services sector

(ktoe)

Source	2012	2013
Coal	2.71	6.19
Petroleum products	46.17	42.86
Biomass	6.71	6.92
Electricity	59.81	61.00
Solar energy	0.48	0.53
Gained heat	1.21	1.28
Total	117.09	118.79



Figure 17. Proportion of energy sources used in the services sector (%)

In 2012, the most consumed energy source in the services sector was electricity, with 61 ktoe or a share of 51.3% of the overall consumption. Petroleum products were used at the amount of 42.86 ktoe or 36.1%. Biomass was consumed at the amount of

6.92 ktoe or 5.8% of the whole energy consumed by the service sector. Coal had a consumption amount of 6.19 ktoe or 5.2% from the total consumption. Gained heat was consumed at the amount of 1.28 ktoe or 1.1% of the total energy, while solar energy was at the level of 0.53 ktoe or 0.4% of the overall energy sources used in the services sector. Regarding gained heat, heating supply was not stable, because of the collective disconnections of district heating clients due to the lack of fuels for combustion for heating purposes (heavy duty oil).

1.5.2. Coal consumption in the services sector

Coal	2012	2013
Anthracite	0.00	0.00
Bitumen and other Coal	0.00	0.08
Coke coal	0.00	0.00
Brown Lignite/Coal	2.59	6.11
Coke and semi-coke	0.00	0.00
Coal gas, gas, etc.	0.00	0.00
Turpentine coke from soot	0.00	0.00
Brown coal briquette	0.00	0.00
Soot	0.00	0.00
Peat	0.00	0.00
Total	2.59	6.19

Table 20. Overview of consumption of all coal types in the service sector (ktoe)

The main type of coal consumed in the service sector is lignite. The amount of the coal consumed in 2013 is 6.11 ktoe. Its consumption is mainly in heating facilities in the service sector. Bituminous coal and others take 0.08 ktoe share in the total consumption.

1.5.3. Consumption of petroleum products in the services sector

Table 21. Overview of the consumption of all petroleum products in the services sector (ktoe)

Petroleum products	2012	2013
Gasoline	0.23	0.20
Gasoil	0.00	0.00
Kerosene	0.00	0.00
Kerosene (Jet fuel)	0.00	0.00
Fuel oil/heavy oil	11.32	8.18
Diesel	21.60	21.79
LPG	13.02	12.70
Petroleum coke	0.00	0.00
Other petroleum products	0.00	0.00
Petroleum remnants	0.00	0.00
Bitumen	0.00	0.00
Total	46.17	42.86

Ministry of Economic Development



Figure 18. Overview of the consumption of all petroleum products in the services sector (%)

The most consumed petroleum product in the services sector is diesel, amounting to 21.79 ktoe or 50.8% of the total of petroleum products used. After diesel, LPG follows, with 12.07 ktoe or 29.6%. The amount of energy consumed in heavy duty oil in the service sector was 8.18 ktoe or 19.1%, and gasoline the last with 0.20 ktoe or 0.5% of the overall consumption of petroleum products.

1.6. Energy consumption in the transport sector

1.6.1. Consumption of all energy products in the transport sector

Transport sector includes all transport means, regardless of the economic sector they are used in (transport, household, industry, services, agriculture).

The transport sector includes road, railroad and air transport.

Source	2012	2013
Diesel	249.80	241.57
Gasoline	67.23	61.64
Kerosene	14.29	14.99
LPG	11.34	10.32
Total petroleum products	342.65	328.52
Biofuels	0.00	0.00
Total	342.65	328.52

Table 22. Overview of the consumption of all energy sources in the transport sector (ktoe)



Figure 19. Proportion of all energy sources in transport sector consumption (%) The assumed energy consumption in the transport sector for 2013 was 328.52 ktoe. A decrease was recorded at the level of -4.1% compared to 2012.

Diesel is the most used energy product in 2013 by the transport sector. The amount of energy consumed in this product is 241.57 ktoe or 73.5% of the overall consumption in the transport sector. The second most used energy product used in the transport sector is gasoline with 61.64 ktoe or 18.8% of the total consumption, followed by kerosene (used exclusively in air transport) with 14.99 ktoe or 4.6% of the total consumption and LPG with 10.32 ktoe or 3.1% of the total consumption.

It must be stated that the transport consumption data so far were re-estimated pursuant to the study on agricultural consumption made in 2013.

Consumption of all energy sources in the agricultural sector

1.7. Energy consumption in the agricultural sector

1.7.1. Consumption of all energy sources in the agricultural sector

Energy consumption in the agricultural sector in 2013, calculated as a subtraction of the amount supplied and the amount of energy for all other sectors, amounts to 29.34 ktoe. An increase was noted of 47.8% in comparison to 2012. Energy products used most in the agriculture sector are petroleum products with 27.24 ktoe or 92.8% of the overall energy consumed by the sector, followed by electricity with 1.21 ktoe or 4.1%, coal with 0.61 ktoe or 2.1%, and biomass with 0.28 ktoe or 1% of the overall energy consumption in this sector.

Source	2012	2013
Coal	0.00	0.61
Petroleum products	10.94	27.24
Biomass	2.25	0.28
Electricity	6.66	1.21
Total	19.85	29.34

Table 23. Overview of consumption of all energy sources by the agriculture sector (ktoe)



Figure 20. Overview of the consumption of all energy sources in the agriculture sector (%)

Energy consumption in the agricultural sector was estimated in compliance with a study taken in 2013, resulting that agriculture has absorbed much more energy than estimated in the past years. Upon conclusion of the study on energy consumption in the transport sector in 2014, a review of earlier years of consumption in all sectors is to take place.

1.7.2. Coal consumption in the agriculture sector

Coal	2012	2013
Anthracite	0.00	0.00
Bitumen and other Coal	0.00	0.00
Coke coal	0.00	0.00
Brown Lignite/Coal	0.00	0.61
Coke and semi-coke	0.00	0.00
Coal gas, gas, etc.	0.00	0.00
Turpentine coke from soot	0.00	0.00
Brown coal briquette	0.00	0.00
Soot	0.00	0.00
Peat	0.00	0.00
Total	0.00	0.61

Table 24. Overview of the consumption of all coal types in the agriculture sector (ktoe)

The agricultural sector has consumed lignite at a level of 0.61 ktoe in 2013.

1.7.3. Consumption of petroleum products in the agriculture sector

Petroleum products	2012	2013
Gasoline	0.06	1.20
Gasoil	0.00	0.00
Kerosene	0.00	0.00
Kerosene (Jet fuel)	0.00	0.00
Fuel oil/heavy oil	0.00	0.06
Diesel	10.88	25.98
LPG	0.00	0.00
Petroleum coke	0.00	0.00
Other petroleum products	0.00	0.00
Petroleum remnants	0.00	0.00
Bitumen	0.00	0.00
Total	10.94	27.24

Table 25. Overview of the consumption of all petroleum products in the agriculture sector (ktoe)



Figure 21. Overview of the consumption of all petroleum products in the agriculture sector (%)

Diesel is the energy product consumed most in the agriculture sector. The amount this energy product consumption amounts to 25.98 ktoe, or 95.4% of the total energy consumed in the sector. Gasoline takes part merely with 1.20 ktoe, or 4.4%, while heavy oil takes 0.06 ktoe, or 0.2% of total consumption.

1.8. Energy demand coverage in all sectors

1.8.1. Coal (lignite) supply

Economic sector	2012	2013
Industry	10.25	20.22
Household	16.10	18.22
Agriculture	0.00	0.61
Services	2.59	6.11
End-use energy consumption	28.94	45.17
Available for end-use consumption	28.94	36.17
Statistical difference	0.00	-9.00

Table 26. Lignite demand coverage by economic sector (ktoe)

The basis for the calculation of lignite consumption in 2013 is official lignite sales data (wet and dry) obtained from 'Kosova Coal' J.S.C. and the department of mining commercial support in KEK. The -9 ktoe amount estimated as a statistical difference means that the coal amount is consumed by mines which are not under KEK's control.

1.8.2. Electricity supply

Electricity supply in 2013 was mainly provided through generation in Thermal Power Plants Kosova A and Kosova B, and hydro power plants (Ujmani, Lumbardhi, Radavci, Dikanci and Burimi). The amount of electricity generated in thermal power plants in 2013 reached 548.84 ktoe, whereas electricity generated in hydro power plants amounted to 12.32 ktoe.

As presented in Table 27, the electricity power supply in 2013 from thermal power plants was 5,877.49 GWh, and electricity from hydro power plants 143.30 GWh. Electricity supplied via import amounted to 521.71 GWh.

2012	MWh
² TPP Kosovo A	2,014,046
³ TPP Kosovo B	3,863,439
HPP Ujmani	99,387
SHPP Lumbardhi	29,707
SHPP Radavci	4,104
SHPP Dikanci	7,963
SHPP Burimi	2,140
Total	6,020,789

Table 27.Electricity generation

Source: annual electricity balance 2012 – KOSTT J.S.C

² TPP 'Kosova A' represents energy output in the transmission threshold

³ TPP 'Kosova B' represents energy output in the transmission threshold

1.8.3. Petroleum product supply

Petroleum products were supplied through imports. Below is the coverage of petroleum product consumption for energy and non-energy purposes:

Economic sector	2013
Industry	116.51
Transport	328.52
Household	16.51
Agriculture	27.24
Services	42.86
Final energy consumption	531.65
Final non-energy consumption	41.93
Available for final consumption	568.33

Table 28. Petroleum product demand coverage by economic sector (ktoe)

The main consumer of petroleum products for energy purposes remains the transport sector with 328.52 ktoe or 61.8% of the total energy consumption of the said products, followed by the industry sector with 116.51 ktoe or 21.9%, the service sector with 42.86 ktoe or 8.1%, the agriculture sector with 27.24 ktoe or 5.1% and the household sector with 16.51 ktoe or 3.1% of the total consumption.



Figure 22. Proportion of economic sectors in petroleum product demand coverage (%)

1.9. Energy indicators

There is a number of indicators that express the relation between energy and other economic, demographic and other indicators. Main such indicators include:

- Energy consumption per capita; and
- Energy intensity.

 <u>Energy consumption per capita</u> – is an indicator of the economic development of a country. The amount of energy consumed per capita in Kosovo during 2013 was 0.70 toe⁴.

<u>Energy intensity</u> – is an indicator that expresses the relation between available primary energy and the gross domestic product (GDP). In 2013, energy intensity amounted to 0.46toe/1000. This indicator expresses energy efficiency of a given country's economy. The higher the intensity is, the more efficient is the country's economy, from energy consumption viewpoint.

1.10. Environmental pollution

1.10.1. Impact of the thermal power plants on environmental pollution

Due to the design of electro-static precipitators at TPP Kosovo B, and the lack of abatement plants for pollutants such as NOx and SO2, the high content of inorganic matters in lignite and other problems in combustion, polluting emissions to atmosphere are higher than the allowed limit values. In TPP Kosovo A units, namely units A3, A4 and A5, particulate emissions are measures, while emissions of other pollutant gases are calculated. At TPP Kosovo B, since August 2012, gas and dust emission measurement analysers have been installed.

The following table shows total and specific average emissions for TPPs Kosovo A and B in 2013, and their percentage differences compared to 2012

	Du	st	SC) ₂	NO	2	CO	2
TPP Kosova A	mg/N	%	mg/N	%	mg/N	%	mg/N	%
	m ³		m ³		m ³		m ³	
A3	53	-91.76	775	29.38	706	15.74	261.96	-0.70
A4	649	-10.85	837	43.81	716	4.22	264.2	0.20
A5	54	-88.49	751	7.29	681	-1.73	263.4	-0.10
TPP B	169	-72.48	790	31.45	697	4.03	262.62	-0.30
B1	672	60.38	664	6.58	840	6.46	237.30	-9.75
B2	657	47.97	692	14.38	829	0.48	239.10	-0.54
TC B	665	62.59	678	10.97	835	2.71	238.20	-5.14
EU Criteria	50)	40	0	500)		

Tab .. Total and specific average annual emissions, measured and calculated by unit

Source: 2013 KEK Environmental Report

The air pollution discharge levels are over values set forth by EU directives, apart from the particulate emissions at TPP Kosovo A (A3, A4 and A5). The table above shows that in 2013, the TPP Kosovo A made a considerable effort to increase the use-rate of equipment and rational use of raw matter and reproductive material, as a better pretvention for reducing pollutants, and one may clearly view the installation of new electro-static precipitators in units A5, A3 and A4 in terms of environmental improvement. Current emissions of KEK plants according to EU Directive 2001/80/EC must be achieved according to the criteria as shown in the table.

⁴ Official records of the population of Kosovo were obtained from the SAK Ministry of Economic Development

APPENDIXES

Appendix 1. Features of the energy system in Kosovo

Thermal Power Plant Unit	TPP U	nit Capa	Commissioning data (age)		
	Installed	Net	Available		
		TPP Ko	osova A		
Unit A1	65	58	0	1962 (51)	
Unit A2	125	110	0	1964 (49)	
Unit A3	200	182	100-130	1970 (43)	
Unit A4	200	182	100-130	1971 (42)	
Unit A5	210	187	100-135	1975 (38)	
TPP Kosovo B					
Unit B1	339	310	180-260	1983 (30)	
Unit B2	339	310	180-260	1984 (29)	

Installed capacities of Kosovo TPP generation units

Installed capacities of generation units from renewable energy sources (RES)

Renewable sources	Generator	Commissioning year	Active Power (MW)
Wind	G1	2010	0.45
powered	G2	2010	0.45
generators (RES)	G3	2010	0.45
Total			1.35

Installed	capacities	of gen	eration	units	of K	losovo's	HPPs
-----------	------------	--------	---------	-------	------	----------	------

Generation unit	Unit capaci	ty (MW)	Commissioning
	Installed	Net	(reconstruction)
HPP Ujmani	35.00	32.00	1983
HPP Lumbardhi	8.08	8.00	1957 (2006)
HPP Dikanci	1.00	0.94	1957 (2010)
HPP Radaci	0.90	0.84	1934 (2010)
HPP Burimi	0.86	0.80	1948 (2011)
Total HPP	45.84	42.58	

LINES			
High voltage	Length	Medium and low voltage	Length
kV	km	kV	km
400	188	35	625
220	232	10	6,874
110	802	0.4	11,955
Total	1,222		19,453.4

Length of the lines of Kosovo's electricity system

Generation capacities of Kosovo's district heating companies

Company (city)	Installed capacity (MW)	Operational capacity (MW)	Length of distribution grid (km)	Number of substations
DH Termokos	135.62	135.62	70	323
DH Gjakova	Gjakova 38.6		23.5	260
DH Mitrovica	16.9		4.5	20
DH Zveçan	veçan 1.6		0.8	

Appendix 2. Features of energy resources, and unit conversion

	kcal	kJ	kWh	kgoe					
1 kcal	1	4.1871	0.001163	0.0001					
1kJ	0.2388	1	0.000278	0.0239 x 10 ⁻³					
1kWh	860	3600	1	0.086					
1kgoe	10000	41871.4	11.62	1					

Unit Conversion

Energy type	Unit	kJ	kgoe	toe	ktoe
Anthracite	kg	27,000.00	0.645	6.45E-04	6.45E-07
Bitumen coal and other	kg	20,125.00	0.481	4.81E-04	4.81E-07
Coal stone for coke	kg	29,310.00	0.700	7.00E-04	7.00E-07
Lignite	kg	7,802.15	0.186	1.86E-04	1.86E-07
Coke and semi-coke	kg	28,500.00	0.681	6.81E-04	6.81E-07
Coal gas, water gas, etc.	kg	20,000.00	0.478	4.78E-04	4.78E-07
Turpentine coke from coal tar	kg	37,700.00	0.900	9.00E-04	9.00E-07
Brown coal	kg	8,060.24	0.193	1.93E-04	1.93E-07
Brown Coal Pellet	kg	20,014.53	0.478	4.78E-04	4.78E-07
Peat	kg	10,802.82	0.258	2.58E-04	2.58E-07
White fuel	kg	43,600.00	1.041	1.04E-03	1.04E-06
Aviation gasoline	kg	44,006.84	1.051	1.05E-03	1.05E-06
Gasoline	kg	44,006.84	1.051	1.05E-03	1.05E-06
Kerosene	kg	43,001.93	1.027	1.03E-03	1.03E-06
Fuel oils/heavy duty oil	kg	39,610.34	0.946	9.46E-04	9.46E-07
Petroleum	kg	42,290.11	1.010	1.01E-03	1.01E-06
LPG	kg	46,016.67	1.099	1.10E-03	1.10E-06
Petroleum coke	kg	31,403.55	0.750	7.50E-04	7.50E-07
Other petroleum products	kg	39,987.19	0.955	9.55E-04	9.55E-07
Bitumen	kg	37,684.26	0.900	9.00E-04	9.00E-07
Petroleum remains	kg	39,987.19	0.955	9.55E-04	9.55E-07
Biomass (20% humidity)	m ³	6,155,095.80	147.17	1.47E-01	1.47E-04
Biomass (40% humidity)	m ³	3,596,585.77	85.90	8.59E-02	8.59E-05
Biomass (45% humidity)	m ³	3,507,670.18	83.77	8.38E-02	8.38E-05
Biofuel	kg	6,168,000.00	0.874	8.74E-04	8.74E-07
Heating	kWh	3,600.94	0.086	8.60E-05	8.60E-08
Electricity	kWh	3,600.94	0.086	8.60E-05	8.60E-08

Features of energy resources

Appendix 3. Annual energy balance of the Republic of Kosovo for	2013
---	------

Balanca vjetore e Energjisë për 2013 (ktoe)	Totali	Antracit	Thëngjill bituminoz dhe tiera	Thëngjill guri për koks	Linjit	Koks dhe givsëm koks	Gaz thëngjilli, gaz uji eti.	Koks terpentinë nga katrani	Brikete të thëngjillit të murrëm	Katran	Torfë	Totali i thëngjillit
Prodhimi primar	1790.14				1528.81	5,577						1528.81
Prodhimet e përfituara												
Importet	637.73	0.00	10.27	0.00	0.53	0.07	0.00	0.00	0.02	0.00	0.44	11.32
Diferenca e stokut	14.62				14.62							14.62
Eksportet	79.11	0.00	0.01	0.00	2.58	0.00	0.00	0.00	0.00	0.00	0.00	2.59
Bunkerët												
Konsumi i brendshëm bruto	2363.38	0.00	10.26	0.00	1541.38	0.07	0.00	0.00	0.02	0.00	0.44	1552.16
Hyrja në transformim	1516.95	0.00	0.00	0.00	1505.21	0.00	0.00	0.00	0.00	0.00	0.00	1505.21
Termocentralet	1510.46				1505.21							1505.21
Termocentralet me prodhim automatik												
Centralet bërthamore												
Impiantet me lëndë djegëse të patentuara dhe brikete												
Impiantet me furrë koksi												
Impiantet me furrë martin												
Stacionet e gazifikimit												
Rafineritë (mikro rafineri)	0.00											
Impiantet e ngrohjes qëndrore	5.73											
Panele solare	0.76											
Daljet nga Transformimi	554.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Termocentralet	548.84											
Termocentralet me prodhim automatik												
Centralet bërthamore												
Impiantet me lëndë djegëse të patentuara dhe brikete												
Impiantet me furrë koksi												
Impiantet me furrë martin												
Stacionet e gazifikimit												
Rafineritë (mikro rafineri)	0.00											
Impiantet e ngrohjes qëndrore	5.04											
Panele solare	0.76											
Shkëmbimet dhe transferet, kthimet	0.00											
Transferet e mesproduktit												
Produktet e transferuara												
Kthimet nga industria petrokimike												
Humbjet ne transformim	0.00											0.00
Konsumi nga deget e energjise (vetekonsumi)	57.63											
Humbjet në bartje dhe shpërndarje	76.52	0.00	40.00	0.00	00.47	0.07	0.00	0.00	0.00	0.00		40.05
Ne dispozicion per konsum final Konsumi final is anomiatik	1266.92	0.00	10.26	0.00	36.17	0.07	0.00	0.00	0.02	0.00	0.44	46.95
	42.37									0.00	0.44	0.44
Industria kimike	0.44									0.00	0.44	0.44
Sektorel ijere	41.93	0.00	40.00	0.00	45.47	0.07	0.00	0.00	0.00	0.00	0.00	0.00
Nonsumi indi renergjise	1236.60	0.00	10.20	0.00	45.17	0.07	0.00	0.00	0.02	0.00	0.00	30.47
Industria a halu vit dha salilu t	200.03	0.00	10.10	0.00	20.22	0.07						30.47
Industria e metaleve io forroro	11.00 25 55	0.00	10.15		10.07	0.07						20./9
Industria e metaleve jo-renore	25.55	0.00			0.00	0.00						0.00
Industria e vhamit geramikës dhe materialeve ndërtimore	67 67				0.00							0.00
	1 90				0.10						l	0.10
Industria e uspainit nijeve dbe dubanit	55.98	0.00	0.03		4.45							4.48
Industria e takstitli läkuräs dhe veshämbathies	0.00	0.00	0.05		0.00							0.00
Industria e letrés de stampimit	0.00				0.00							0.00
Invinieringu dhe industrită țiera tă metaleve	0.1				0.00							0.00
Industritë tiera	36.06				0.02							0.02
Transporti	328.52			0.00	0.00							0.02
Transporti hekurudhor	2.42			0.00	5.00							
Transporti munor	311.11											
Transporti airor	14.99											
Navigacioni i brendshëm												
Amvisëria	495.52			0.00	18,22				0.02			18.24
Buigësia	29.34			0.00	0.61				5.02			0.61
Shërbimet	118.79		0.08	0.00	6.11	0.00						6.19
Diferenca statistikore	-14.26	0.00	0.00	0.00	-9.00	0.00	0.00	0.00	0.00	0.00	0.00	-9.00

Balanca Vjetore (e realizuar)e Energjisë për 2013 (ktoe)	Benzinë	Gazoil	Kerozinë	Kerozinë (Jet fuel)	Vajra të rënda/mazut	N a ftë	GLN	Koks nafte	Produkte tjera nafte	Vajrat lubrifikante	Mbetje nafte	Bitumen	Totalii produkteve të naftës
Prodhim i prim ar													
Prodhim et e përfituara													
Im portet	66.77	0.00	0.00	14.99	36.08	317.94	39.68	62.22	0.00	4.43	0.00	38.72	580.82
Diferenca e stokut													
Eksportet		0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.02	0.00	1.20	1.50
Bunkerët													
Konsum i i brendshëm bruto	66.77	0.00	0.00	14.99	36.08	317.94	39.68	61.93	0.00	4.41		37.52	579.32
Hyrja në transform im		0.00	0.00		8.83	2.16	0.00	0.00					10.98
Termocentralet					3.09	2.16							5.25
Term ocentralet m e prodhim automatik													
Centralet bërtham ore													
Im piantet m e lëndë djegëse të patentuara dhe brikete													
Im piantet m e furrë koksi													
Im piantet m e furrë m artin													
Stacionet e gazifikimit													
R a fin e ritë		0.00	0.00		0.00								0.00
Im piantet e ngrohjes qendrore					5.73								5.73
Panele solare													
Daljet nga Transform im i	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Termocentralet													
Term ocentralet m e prodhim automatik													
Centralet bërtham ore													
Im piantet me lëndë djegëse të patentuara dhe brikete													
Im piantet m e furrë koksi													
Im piantet m e furrë m artin													
Stacionet e gazifik im it													
Rafineritë					0.00	0.00	0.00						0.00
Im piantet e ngrohjes qendrore													
Panele solare													
Shkëm bim et dhe transferet, kthim et													
Transferet e mesproduktit													
Produktet e transferuara													
K thim et nga industria petrokimike													
Hum bjet në transform im					0.00	0.00	0.00	0.00	0.00	0.00			0.00
Konsum i nga degët e energjisë (vetkonsum i)					0.00	0.00							0.00
Hum bjet në bartje dhe shpërndarje													
Në dispozicion për konsum final	66.77	0.00	0.00	14.99	27.25	315.78	39.68	61.93	0.00	4.41		37.52	568.33
Konsum i final jo-energjetik	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	4.41		37.52	41.93
Industria kimike												0.00	0.00
Sektoret tjere										4.41		37.52	41.93
Konsum i final i energjise	66.77	0.00	0.00	14.99	27.25	318.97	41.68	61.93	0.00	0.00		0.00	531.65
in dustria	0.53	0.00		0.00	19.07	25.26	9.72	61.93	0.00	0.00		0.00	116.51
industria e nekurit dne çelikut	0.00				0.00	0.51	0.00	7.36					7.86
Industria e metaleve jo-lerrore	0.00				16.73	7.33	0.10	0.00					24.16
Industria e vhemit, geremikëe dhe meteriolove adërtimere	0.03				0.00	0.00	1.17	44.00					1.19
industria e xnamit, geramikes dhe materialeve ndertimore	0.33				1.58	12.38	6.03	41.68					61.99
Industria e inxjerijes se xelleve	0.01				0.38	0.25	0.00						0.64
Industria e usirqimit, pijeve une uunanit Industria e teketitli läkuräs dhe veshämhathies	0.13				0.19	3.54	2.33						6.19
Industria e letrês dhe stampimit	0.00				0.00	0.00	0.00						0.00
Invisionale lettes une stallipinit	0.00				0.00	0.00	0.00						0.00
	0.00				0.00	0.00	0.00	12.00				0.00	0.00
Transnorti	61.64	0.00		14.99	0.19	241 57	10.10	12.90	0.00	0.00		0.00	14.40
Transporti bekurudhor	01.84	0.00		14.39	0.00	2 41.37	0.00	0.00	0.00	0.00		0.00	2 4 2
	61.64					239 16	10.32						311 11
Transporti airor	01.04		<u> </u>	14 99		0.00	0.02	ł	1		ł	<u> </u>	14 00
Navigacioni i brendshëm	0.00		 	14.39		0.00	0.00						14.35
A m visë ria	3 20	0 0 0		0.00	0.00	4 36	8 94	0.00	0.00	0.00		0.00	16 51
Buigësia	1 20	0.00		0.00	0.00	25.98	0.04	0.00	0.00	0.00		0.00	27.24
Shërbim et	0.20	0.00		0.00	8.19	21.79	12 70	0.00	0.00	0.00		0.00	42.86
Diferenca statistikore	0.00	0.00	0.00	0.00	0.10	-3 19	-2.00	0.00	0.00	0.00		0.00	-5.25
	5.00	0.00	0.00	0.00	0.00	-5.19	-2.00	0.00	0.00	0.00		0.00	-5.25

Ministry of Economic Development

Balanca Vjetore (e realizuar)e Energjisë për 2013 (ktoe)	Biomasë	Biokarbura nte	Hidroenergji	Energji solare	Energjie erës	Ngrohje e përfituar	Energji elektrike
Prodhim i prim ar	248.25		12.32	0.76	0.00	•	
Prodhim et e përfituara							
Im portet	0.72	0.00					44.87
Diferenca e stokut							
Eksportet	1.320	0.00					73.69
Bunkerë t							
Konsumii brendshëm bruto	247.65	0.00	12.32	0.76	0.00		- 2 8 . 8 2
Hyrja në transform im	0.00	0.00	0.00	0.76	0.00		0.00
Term ocentralet							
Termocentralet me prodhim automatik							
Centralet bërtham ore							
Im piantet m e lëndë djegëse të patentuara dhe brikete							
Im piantet m e furrë koksi							
Im piantet m e furrë martin							
Stacionet e gazifikim it							
R a fin e ritë							
lm piantet e ngrohjes qendrore							
Panele solare				0.76			
Daljetnga Transform im i	0.00	0.00	0.00	0.76	0.00	5.04	548.84
Term ocentralet							548.84
Term ocentralet me prodhim automatik							
Centralet bërtham ore							
Im piantet m e lëndë djegëse të patentuara dhe brikete							
Impiantet me furrë koksi							
Impiantet me furrë martin							
Stacionet e gazifikim it							
R a fin e ritë							
Implantet e ngrohjes qendrore						5.04	
Panele solare				0.76			
Snkem bim et dne transferet, ktnim et	0.000		-12.32		0.00		12.32
I ransferet e mesproduktit			-12.32		0.00		12.32
Produktet e transferuara							
kinim et nga industria petrokim ike							
num bjet ne transform im	0.000						
Konsum i nya ueyete energjise (verkonsum i) Hum biot në bartio dhe ebnërndario	0.000					0.46	57.17
n um bjer ne barrje une snjetnu arje	0.000	0.00	0.00	0.76	0.00	0.91	75.61
Konsum i finalio o norgio tik	247.65	0.00	0.00	0.76	0.00	3.07	399.57
Industria kimike	0.000						0.00
Sektorët tjerë							
Konsum i final i energiisë	247 65	0 0 0 0	0 0 0	0 7 6	0.00	3 6 7	399 57
Idustria	11.64	0.000	0.00	0.00	0.00	5.07	108.00
Industria e hekurit dhe çelikut	0.05	0.000	0.00	0.00	0.00		43.96
Industria e m etaleve jo-ferrore	0.00						1.40
Industria kimike	0.03						0.24
Industria e xham it, qeram ikës dhe materialeve ndërtim ore	0.30						5.28
Industria e nxjerrjes së xeheve	0.05						1.20
Industria e ushqim it, pijeve dhe duhanit	4.91						40.40
Industria e tekstitli, lëkurës dhe veshëm bathjes	0.00						0.09
Industria e letrës dhe stam pim it	0.01						0.16
In x h in ie rin g u d h e in d u s tritë tje ra të m e ta le ve	0.00						0.01
In dustritë tjera	6.30						15.26
T ran sporti	0.000	0.00	0.00	0.00	0.00		0.00
Transporti hekurudhor							
Transporti rrugor		0.00					
Transporti ajror							
Navigacioni i brendshëm							
Am visëria	2 2 8 . 8 0	0.00	0.00	0.23	0.00	2.38	2 2 9 . 3 6
B u jq ë sia	0.28	0.00	0.00	0.00	0.00		1.21
Shërbim e t	6.92	0.00	0.00	0.53	0.00	1.28	61.00
Diferenca statistikore	0.00	0.00	0.00	0.00	0.00	0.00	0.00
							-

