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 2015

GODIŠNJI ENERGETSKI BALANS REPUBLIKE KOSOVA ZA 2015. GODINU

ANNUAL ENERGY BALANCE OF REPUBLIC OF KOSOVO FOR THE YEAR 2015

Prishtinë, 2014

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Prishtina, December 2014

This document was prepared by the Energy Balance Division in MED. The document could not be prepared without close cooperation with entities listed in the Administrative Instruction on Energy Balances.

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Abbreviations

MED	Ministry of Economic Development
KOSTT J.S.C.	Kosovo Transmission, System and Market Operator
KEK J.S.C.	Kosovo Energy Corporation
KAS	Kosovo Agency of Statistics
ERO	Energy Regulator's Office
MF	Ministry of Finance
MAFRD	Ministry of Agriculture, Forestry and Rural Development
KFA	Kosovo Forestry Agency
MESP	Ministry of Environment and Spatial Planning
KC	Kosovo Customs
EnCS	Energy Community Secretariat
REKOS	2011 Census of Kosovo population, households and residences
CRES	Center for renewable sources and energy efficiency, Athens - Greece
EUROSTAT	European Community Office of Statistics
IEA	International Energy Agency
LPG	Liquid Petroleum Gas
TPP	Thermal Power Plant
HPP	Hydro Power Plant
GWh	Giga Watt Hour
GW	Giga Watt
MWh	Mega Watt Hour
MW	Mega Watt
RES	Renewable Energy Sources
GDP	Gross Domestic Product

1. Introduction

The "2015 Annual Energy Balance of the Republic of Kosovo" document was compiled based on Article 5 of Law No. 03/L-184 on Energy, and Administrative Instruction No. 07/L-184 on "Rules for Energy Balances". The purpose of this document is to inform all interested parties on the forecasted energy demand in 2014.

The basic documents consulted in the compilation of this document were:

- Kosovo Energy Balances for 2011, 2012 and 2013;
- Electricity Balance for 2015, drafted by KOSTT;
- Electricity Balance for 2015, drafted by KOSTT;
- 2014-2015 Balance, drafted by the District Heating Company Termokos Prishtina J.S.C.;
- 2014-2015 Balance, drafted by the City Heating Company Gjakova J.S.C.;
- Periodic monthly information for 2014, prepared by entities stipulated to provide energy-related data as per AI 2007/11 (Customs, energy enterprises, KAS, etc.).

Data was collected and processed in accordance with the EUROSTAT form requirements. Electricity balance compiled by the Transmission, System and Market Operator (KOSTT), served for the forecasting of electricity demand and determination of means for its coverage. Annual balances of district heating companies in Prishtina and Gjakova served for forecasting heating demand forecasts and its coverage. Annual balances prepared by MED have served as the basis for determining the demand development trend for other energy sources (wood, petroleum products, solar energy) in 2014.

Following are the basic sections of energy balances, according to EUROSTAT format:

- The first part pertains to primary energy products, gained products, imports, exports and stock of all energy products;
- The second part presents transformations of primary products into secondary products. This group includes energy transformation in all plants for transformation of various energy products into electricity; plants for the production of patented energy products and briquetting, gasification plants, furnaces, district heating plants, solar panels. This section also includes energy product exchanges and transfers.
- The third section presents energy losses in distribution and transmission (including all energy products).
- The fourth part elaborates own-expenditure of the energy branch and overall final consumption. Energy expenditure includes all energy used in relation to the operational processes of energy plants.

- The fifth part relates final consumption of energy products. This group includes consumption of all energy products spent by the five energy sectors: households, industry, services, transport and agriculture.

Noteworthy, in this document, energy consumption was forecasted based on the energy consumption surveys administered between 2009 and 2014. Energy consumption was studies from both sector-specific economic viewpoint (industry, household, services, transport and agricultural) and from the perspective of the type of energy products utilized.

The basis for this analysis were survey implemented in 2009 on the 2008 consumption of all economic sectors, survey implemented in 2011 on biomass consumption in 2010 and 2009 in the household, services and industry sector (implemented by CRES, commissioned by the Energy Community), and survey on energy consumption in households and industry sector implemented in 2010 (by MPR Group), in the households sector, implemented in 2011 (by INTECH), and in the services sector implemented in 2012 (by Studio Links 4).

2. Supply of energy products for the period 2012-2014

Forecasting of energy consumptions for the following year (2015) is based on the trends noted in the last three years. Data on 2014 is based on the last available statistical energy data, namely data for the first eight months of this year, while the data for the remaining four months was projected based on the average data of those eight months.

Table 1 presents data on the quantity of primary energy products available in 2012, 2013 and 2014.

Table 1. Overview of primary energy products available in 2012-2014 (ktoe)

Source	**2012**	**2013**	**2014**
Coal	1528.10	1552.16	1524.30
Petroleum products	560.65	579.32	606.87
Biomass	247.49	247.65	251.66
Electricity	13.09	-28.82	48.74
Hydropower	8.22	12.32	11.04
Solar energy	0.69	0.76	0.53
Total	**2358.24**	**2363.39**	**2443.13**

Source: MED energy balance documents

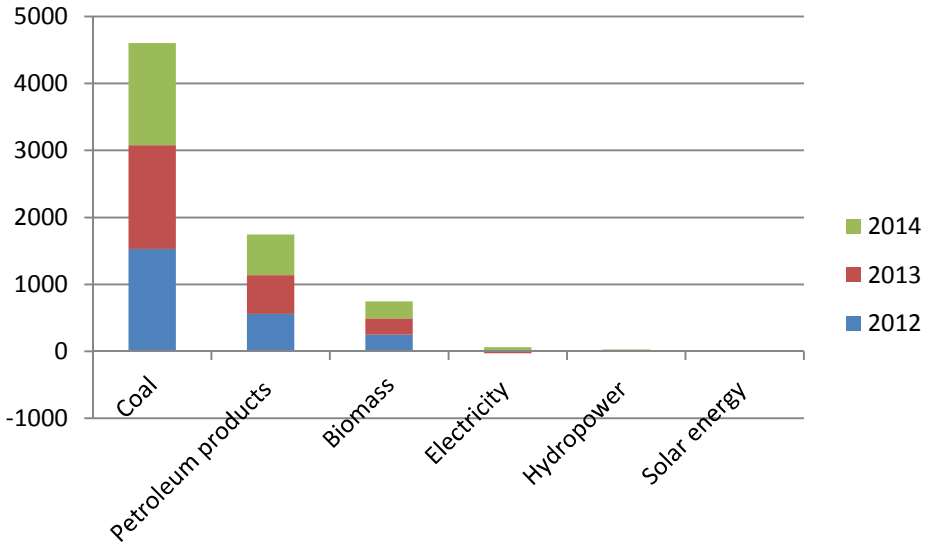

Figure 1. Overview of the quantity of primary energy sources available in 2012-2014

Electricity imports are considered primary energy products, as the transformation of such energy has not occurred in our country, but abroad.

As shown in Table 1 and diagram in Figure 1, the total amount (gross) of available energy in 2014 is 2443.13 ktoe while in 2013 was 2363.39 ktoe. So, in 2014 there was an increase in the amount of power available at the rate of 3.4%.
As seen from Table 1, in 2014 there is a significant increase in net imports of electricity that has come as a result of measures taken to safeguard security of electricity supply after the damage it caused in Kosovo A on 6 June 2014.
During the review of the Balance of electricity the foreseen energy consumption is not affected, but only compensate for the amount of predicted energy of production with additional import.
Also with the reviewing of the Balance of electricity in 2014, the amount of coal is forecast to produce is not changed which has had an effect only in increasing the amount of coal reserves.

3. Final energy consumption in 2012-2014

Following is the data on the quantity of various energy products consumed in the period 2012-2014. This is done in order to present the supporting basis for the analysis of energy demand forecast for 2015.

Consumption in 2012 and 2013 is based on the research and surveys implemented in 2009, 2010, 2011, 2012 and 2013.

3.1. Consumption by type of energy products

The Table 2 below presents consumption of energy products for energy and non-energy purposes in the period 2012-2014:

Table 2. Overview of the consumption of all energy products (ktoe) in the period 2011-2013

Source	2012	2013	2014
Coal	68.17	55.95	59.2
Petroleum products	561.18	573.58	589.07
Biomass	247.5	247.65	251.66
Electricity	384.54	399.57	416.43
Solar energy	0.69	0.76	0.53
Gained energy	3.44	3.67	8.01
Total	**1265.52**	**1281.18**	**1324.9**

Source: MED energy balance documents

Table 2 shows that petroleum products represent the energy product consumed most during the period, as it covers 44.5% of the overall consumption. Electricity is ranked second, covering 31.4% of the consumption, biomass covers 19%, coal covers 4.5%, gained heat covers for 0.6% and solar energy covers 0.04%.

Figure 2 provides a graphical presentation of energy consumption trends, by energy product used in the period 2012-2014.

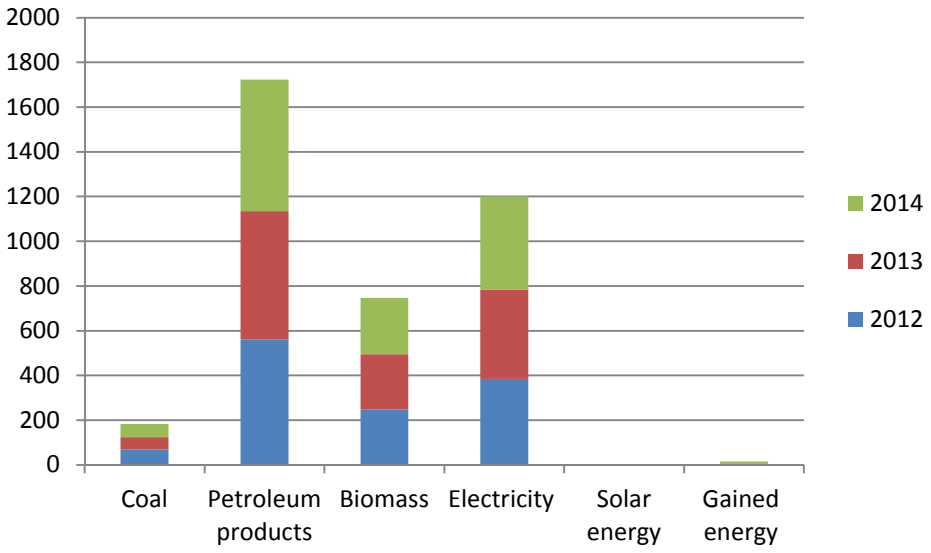

Figure 2. Overview of energy product consumption for all sectors, in the period 2012-2014 (ktoe)

3.2. Energy consumption by economic sector

Table 3 presents the state of consumption in various sectors for energy purposes. As noted, the household sector is the sector with the highest energy consumption in the last three years. This sector is followed by the transport sector. The industry sector ranks third in energy consumption, followed by the services sector. The agricultural sector is the sector with the lowest energy consumption throughout the years.

Table 3. Overview of the utilization of energy sources in all sectors (ktoe)

Sector	2012	2013	2014
Industry sector	272.98	266.63	282.35
Household sector	473.73	495.52	517.98
Services sector	117.09	118.79	116.34
Agricultural sector	19.85	29.34	29.85
Transport sector	342.65	328.52	332.24
Total	**1226.3**	**1238.8**	**1278.76**

Source: MED energy balance documents

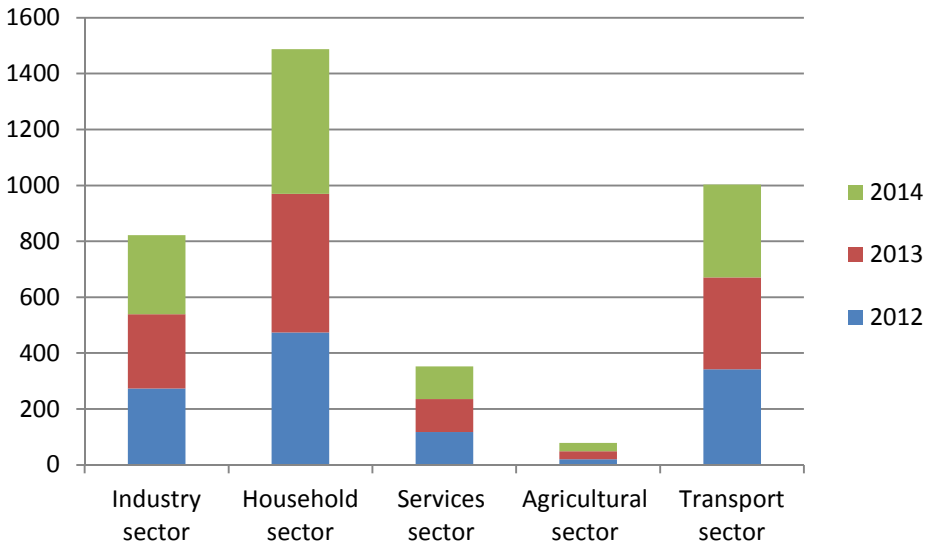

Figure 3. Overview of energy product consumption by sector, in the period 2012-2014 (ktoe)

Final consumption for non-energy use in 2014 amounted to 46.13 ktoe. Peat was the only type of coal consumed for non-energy purposes in the industry sector (0.46 ktoe). Bitumen use, as a petroleum by-product (which is vastly used in road pavement activities, namely in the construction sector), amounted to 41.05 ktoe, whereas the use of lubricants in the chemical industry reached 4.63 ktoe.

Table 4 presents an overview of the final consumption of energy products for non-energy use in the period 2012-2014.

Table 4. Final consumption for non-energy purposes by industrial subsector (ktoe)

Economic sector	2012	2013	2014
Chemical industry	0.4	0.44	0.46
Other industries	41.58	41.93	45.67
Total	**41.98**	**42.37**	**46.13**

3.2.1. Industry sector

Petroleum products are the energy product used most in the industry sector (52.3%), whereby 38.4% is consumed for energy purposes and 13.9 for non-energy purposes, followed by electricity (33.8%), coal (10.3%, of which 10.1% for energy purposes), and biomass (3.6%) which is the least consumed source.

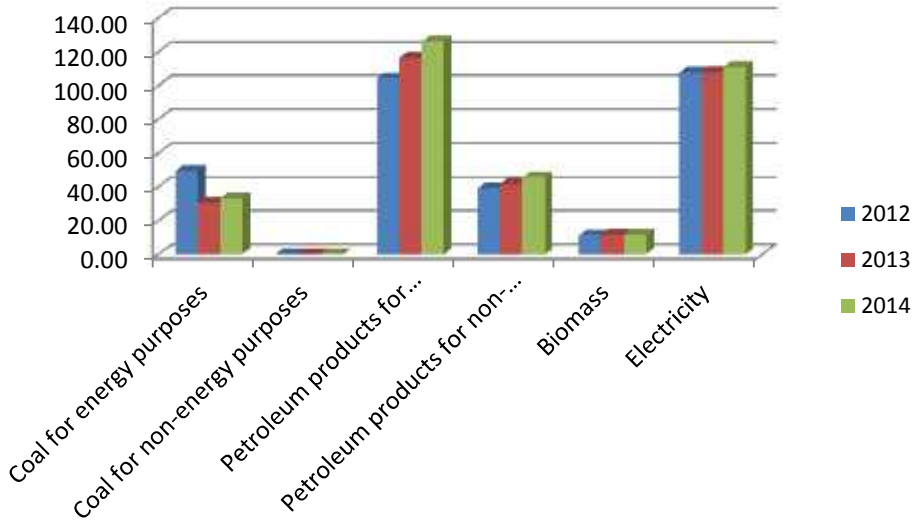

Figure 4. Overview of energy product consumption in the industry sector, in the period 2012-2014 (ktoe)

3.2.2. Household sector

Electricity is the most consumed energy source, covering 47.2% of the energy consumption, followed by biomass (44.9%), coal (3.5%), petroleum products (3.3%), gained heat (1%) and solar energy (0.03%).

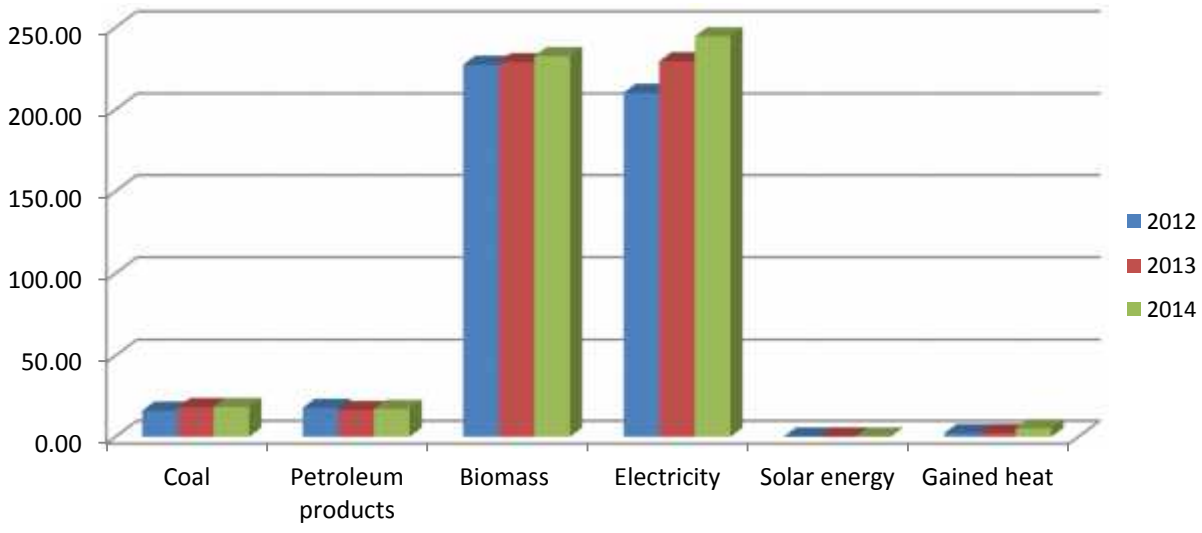

Figure 5. Overview of energy product consumption in the household sector, in the period 2012-2014 (ktoe)

3.2.3. Services sector

Electricity is the most preferred energy source consumed in the services sector (51.1% of the total energy consumed), followed by petroleum products (34.6%), biomass (6.1%), coal (5.5%), gained heat (2.4%) and solar energy (0.3%).

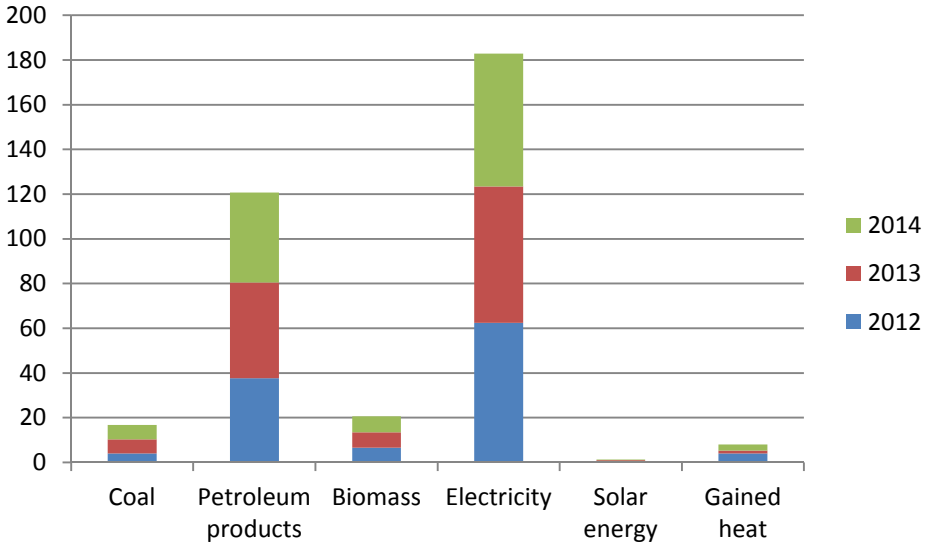

Figure 6. Overview of energy product consumption in the services sector, in the period 2012-2014 (ktoe)

3.2.4. Agricultural sector

In the agricultural sector, petroleum and its products are ranked highest in the overall consumption of the agricultural sector, covering 92.8% of the total energy consumed, followed by electricity (4.2%),coal (2.1%) and biomass (0.8%).

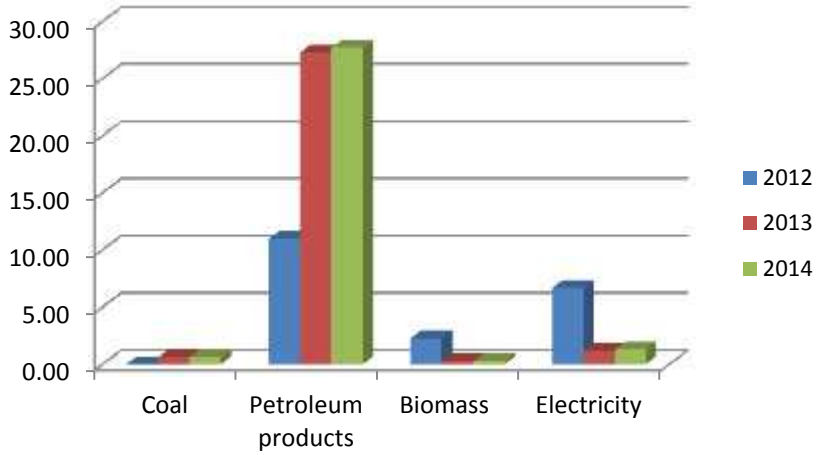

Figure 7. Overview of energy product consumption in the agricultural sector, in the period 2012-2014 (ktoe)

3.2.5. Transport sector

Petroleum products are the only energy products used in the transport sector. Diesel is the energy product consumed most in this sector, covering 74.1% of the total energy produced, followed by gasoline (18.0%), kerosene (4.6%) and LPT (3.2%).

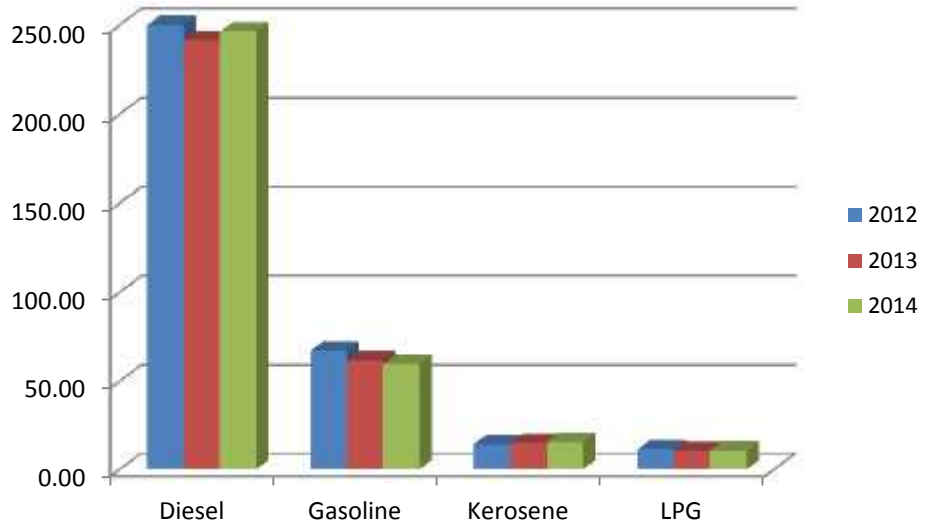

Figure 8. Overview of energy product consumption in the transport sector, in the period 2012-2014 (ktoe)

4. Energy demand forecast for 2015

The forecast of energy demand for all sectors was made based on:

- the overview of energy used in the period 2012-2014 (taking into consideration energy consumption forecasted for 2014, and the economic development of Kosovo in 2014 compared to 2013);
- data on economic growth forecasted in 2015 (4.3%[1]GDP growth);
- growth of the number of households by 1%;
- 2015 Electricity Balance, drafted by the Transmission, System and Market Operator, which provides data on generation, imports, exports, losses in transmission, losses in distribution, coal production, petroleum and heavy oil quantities used, and environmental emissions;
- Forecast of the energy to be used for heating purposes in the 2014-2015 season, drafted by district heating companies in Prishtina and Gjakova.

Therefore, the forecasted growth of energy consumption in 2015 is made taking into consideration the envisaged economic development, which was 4.3% this year.

[1] Based on Ministry of Finance's economic growth forecast for 2013 and 2014.

The figure below represents economic growth between years 2012 and 2013, and the forecasted economic growth between years 2014 and 2015.

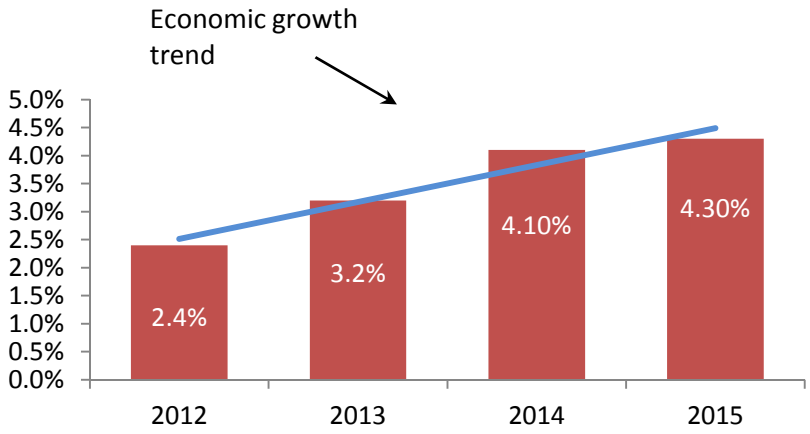

Figure 9. Economic growth trend for the period 2012-2015

4.1. Forecasted energy demand for the household sector

Population is an important factor in the calculation of the energy demand for the household sector. However, energy demand in the household sector is directly dependent on the number of households (whereby one household can host more than one family), and not the number of inhabitants, especially when related to the consumption of logwood. Therefore, a correct ascertainment of the number of households is of key interest for the forecasting of energy consumption in the household sector.

Table 5: Forecast of energy consumption in the household sector in 2015 (ktoe)

Coal	Petroleum products	Biomass	Electricity	Solar energy	Gained heat	Total
18.46	17.61	233.93	256.84	0.21	5.98	533.03

During 2015, the overall energy consumption grew by around 2.9% in comparison to 2014.

In 2015, coal consumption is envisaged to grow from 18.35 ktoe to 18.46 ktoe, biomass consumption will grow from 232.53 ktoe to 233.93 ktoe, petroleum products from 17.14 ktoe to 17.61 ktoe, and gained heat from 5.21 ktoe to 5.98 ktoe; whereas, electricity consumption from 244.59 ktoe to 256.84 ktoe.

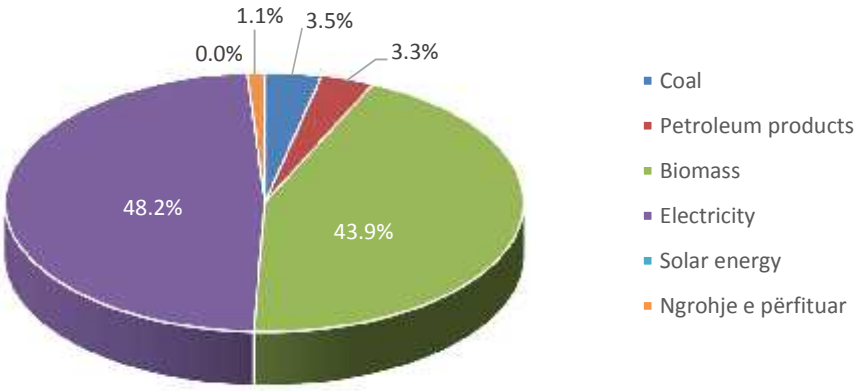

Figure 10. Proportion of all energy products used in the household sector

4.2. Forecast of energy demand in the services sector

Following is the forecast of energy source consumption in the services sector:

Table 6: Forecast of energy consumption in the services sector (ktoe)

Coal	Petroleum products	Biomass	Electricity	Solar energy	Gained heat	Total
6.72	42.46	7.16	70.77	0.50	3.22	130.83

Electricity demand in the services sector in 2015 is envisaged to increase from 59.45 ktoe in 2014 to 70.77 ktoe in 2015.Heating consumption is envisaged to grow from 2.80 ktoe in 2014 to 3.22 ktoe in 2015; coal consumption will grow from 6.45 ktoe to 6.72 ktoe, petroleum products will grow from 40.23 ktoe to 42.46 ktoe, and logwood consumption will grow from 7.05 ktoe to 7.16 ktoe.

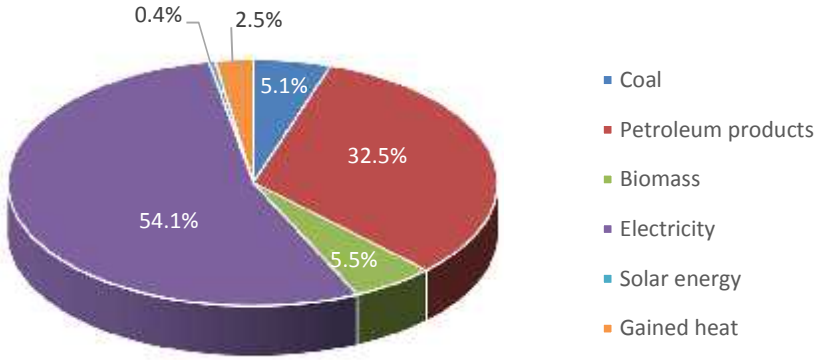

Figure 11. Proportion of all energy products used in the services sector.

4.3. Forecast of energy demand in the industry sector

Following is an overview of the consumption of energy sources in the industry sector:

Table 7. Overview of the consumption of energy sources in the industry sector (ktoe)

	Coal	Petroleum products	Biomass	Electricity	Total
Final overall energy consumption	35.23	199.56	14.09	121.70	370.57
Final consumption for energy purposes	34.75	149.79	14.09	121.70	320.33
Final consumption for non-energy purposes	0.48	49.77	0.00	0.00	50.24

In 2015, total energy consumption in the industry sector, for energy and non-energy purposes, is envisaged to reach 370.57 ktoe. Electricity use in the industry sector is envisaged to increase from 111.12 ktoe in 2014 to 121.70 ktoe in 2015; coal utilization for energy purposes will increase from 33.31 ktoe to 34.75 ktoe, whereas its use for non-energy purposes will increase from 0.46 ktoe to 0.48 ktoe; use of petroleum products for energy purposes is forecasted to grow from 126.08 ktoe to 149.79 ktoe, and for non-energy purposes from 45.67 ktoe to 49.77 ktoe; while biomass from 11.83 ktoe in 2014 to 14.09 ktoe in 2015.

4.4. Forecast of energy demand in the transport sector

Table 8: Forecast of energy product consumption in the transport sector (ktoe)

Diesel	Gasoline	Kerosene	LPG	Total
255.16	57.99	16.10	11.19	340.44

Transport sector is characterized with high consumption of petroleum products and a rather small consumption of biofuels. In 2015, the transport sector is envisaged to have an energy consumption that exceeds that of 2014 by 2.5%. Petroleum product consumption is envisaged keep up with the economic growth forecasted for 2015. Therefore, in total, energy product consumption in the transport sector is envisaged to grow from 332.24 ktoe in 2014 to 340.44 ktoe in 2015.

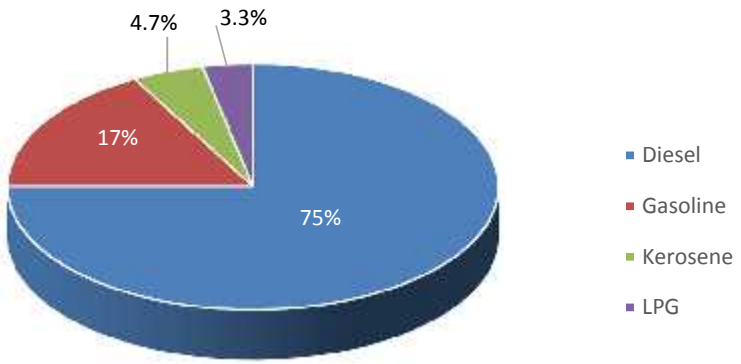

Figure 13. Proportion of all energy products in the transport sector

4.5. Forecast of energy demand in the agriculture sector

Following is the demand of energy products in the agriculture sector: in 2015, agriculture sector consumption is assumed to reach 31.19 ktoe, an amount by 4.5 higher than the consumption in 2014.

As noted in the table and figure below, petroleum products represent the energy source utilized most in the agriculture sector, covering 28.54 ktoe, or 91.5% of the overall consumption, followed by electricity (1.43 ktoe or 4.6%) ,coal (0.66 ktoe or 2.1%) and biomass (0.56 ktoe or 1.8%).

Table 9. Forecast of energy product consumption in the agriculture sector (ktoe)

Coal	Petroleum products	Bimass	Electricity	Total
0.66	28.54	0.56	1.43	31.19

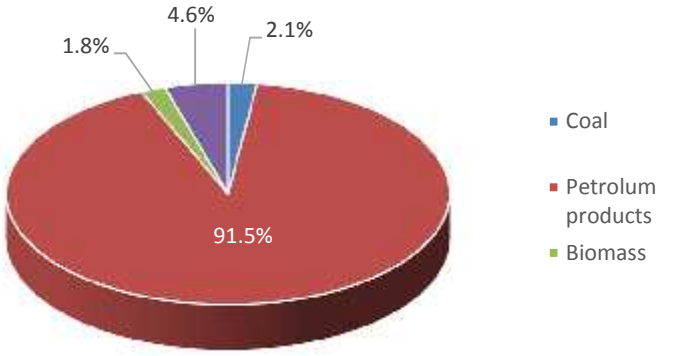

Figure 14. Proportion of all energy products in the agriculture sector

4.6. Forecast of the overall (total) demand of energy products for final consumption in 2015

Following is the forecast of the consumption of all energy products in 2015:

Table 10. Overview of the consumption of all energy products in 2015 (ktoe)

Coal	Petroleum products	Biomass	Electricity	Gained heat	Solar energy	Total
61.07	628.61	255.73	450.74	9.21	0.71	1406.06

Data collected and analyses show that petroleum and its products continue to remain the most utilized energy product in the overall consumption of such products for both energy and non-energy use, covering 44.7% or 628.61 ktoe, followed by electricity (32.1% or 450.74 ktoe), biomass (18.2% or 255.73 ktoe), coal (4.3% or 61.07 ktoe), gained heat (0.7% or 9.21 ktoe,and solar and geothermal energy, which have a rather low consumption rate of 0.71 ktoe and 0.01% respectively.

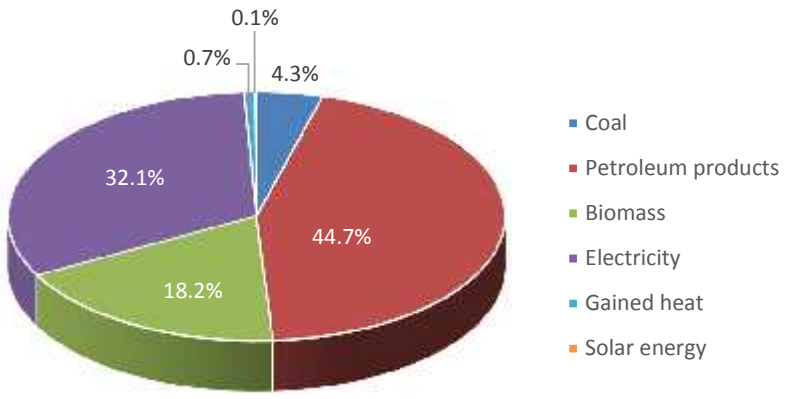

Figure 15. Proportion of all energy products in the overall energy consumption

5. Forecast of electricity losses in 2015

5.1. Electricity losses

Electricity losses are divided into:

- Losses in the transmission grid, which represent the difference of values metered in the input of the transmission system and those metered as transmission output. This includes losses in transition (metering points in interconnection transmission lines (400, 220, 110 kV) transferred in the division limits, using approved transfer coefficients).

- Losses in the distribution grid, which represents the difference between values of electricity measured at the point of input from the transmission grid, and values measured at the electricity output to consumers.

Planning of transmission losses includes losses caused by the consumption load in Kosovo and losses caused by the electricity in transit.
Electricity losses in the transmission network are planned to reach 1.8% of the overall quantity of electricity (generation at the transmission threshold and planned imports), or 114 GWh.
Technical losses in the distribution system are planned to reach 1275 GWh.

5.2. District heating losses

District heating losses in the transmission and distribution losses are planned to be 25,185 MWh.

6. Forecast of electricity generation in 2015

6.1. Forecast of electricity generation from thermal power plants

Annual electricity generation from TPPs are planned to reach the optimal utilization rates of generation capacities.

The following annual temporal availability of generation capacities is planned **5 760** GWh :

- TPP Kosova A will provide **1 927** GWh at the transmission threshold.
- TPP Kosova B will provide **3 833** GWh at the transmission threshold.

6.2. Forecast of electricity generation from hydro power plants and renewable sources

Annual electricity generation from HPP Ujmani is planned to be 84 GWh.

- HPP Ujmani **= 84 GWh**

Annual production of electricity from hydropower and wind power sources connected to the distribution system are planned:

- HPP Lumbardhi = **26,5 GWh**
- HPP (Radavci, Istogu and Dikanci) = **17,5 GWh**
- Wind generators = **2,5 GWh**

The overall electricity provided at the transmission threshold in 2015, generated from TPP Kosova A, TPP Kosova B and HPP Ujmani, is planned to reach **5 844 GWh**. The total

national generation, including hydro power plants connected at the distribution level and wind generators, is planned to reach **5 890 GWh.**

Table 11: Forecast of generation, imports, consumption and losses in the electricity system

	MWh	Gjithësejt	Janar	Shkurt	Mars	Prill	Maj	Qershor	Korrik	Gusht	Shtator	Tetor	Nëntor	Dhjetor
1	Kosova A - Generation at transmission threshold	1,927,016	180,106	162,735	157,474	151,795	156,666	149,464	155,124	155,124	149,404	154,424	174,465	180,235
2	Kosova B - Generation at transmission thresh	3,833,085	375,015	337,537	377,986	189,440	300,029	370,678	366,541	154,564	297,707	378,911	312,638	372,039
3	Ujmani	84,000	9,000	8,000	8,000	8,000	7,000	6,000	4,000	4,000	6,000	7,000	8,000	9,000
4	HPPs in distribution	46,595	2,396	1,979	2,974	6,625	8,880	6,601	2,968	1,483	1,308	3,211	4,110	4,060
5	(1+2+3+4) National generation	5,890,696	566,617	510,251	546,434	355,860	472,575	532,743	528,633	315,171	454,419	543,546	499,213	565,334
6	(1+2+3) Generation (transmission input)	5,844,101	564,121	508,272	543,460	349,235	463,695	526,142	525,665	313,688	453,111	540,335	495,103	561,274
7	Import	507,960	83,300	51,300	23,300	108,240	17,920	0	3,450	98,090	6,720	0	32,250	80,390
8	(6+7) Available energy	6,352,061	647,421	559,572	566,760	457,475	481,615	526,142	529,115	411,778	459,831	540,335	530,353	641,664
9	Trepça	25,850	2,466	2,158	2,331	2,035	2,214	2,001	1,970	1,816	1,967	2,121	2,114	2,667
10	Sharrcemi sh.a	65,750	800	3,000	6,600	6,300	6,500	6,450	6,400	6,500	6,600	6,200	5,500	4,900
11	NewCo Ferronikeli sh.a	631,978	53,675	48,481	53,675	51,943	53,675	51,943	53,675	53,675	51,943	53,675	51,943	53,675
12	Mines	138,000	12,000	12,000	12,000	11,000	11,000	11,000	11,000	11,000	11,000	12,000	12,000	12,000
13	Expenditure of TPPs from transmission	134,093	14,515	13,162	14,510	9,432	10,843	11,370	7,233	7,233	6,920	10,033	14,207	14,635
14	Distribution demand	4,742,845	543,752	471,223	452,148	384,066	351,824	297,128	323,495	320,376	321,168	344,828	391,953	540,883
15	(9+10+11+12+13+14) Net demand	5,738,516	627,208	550,024	541,264	464,776	436,056	379,892	403,773	400,600	399,598	428,857	477,717	628,750
16	Transmission losses	114,337	11,664	10,072	10,202	8,235	8,669	9,471	9,524	7,412	8,277	9,726	9,546	11,550
17	Insufficiency factor	-16,060		-524		-15,536								
18	Excess (export)	515,268	8,669		15,295		36,890	136,780	115,818	3,766	51,956	101,752	43,090	1,364
19	(15+16) Total demand	5,852,853	638,862	560,096	551,465	473,011	444,725	389,362	413,297	408,012	407,875	438,583	487,263	640,300
20	(17+18+19 -8) Balance	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: 2015 Annual Electricity Balance, Kosovo Transmission, System and Market Operator (KOSTT)

*Expenditure of TPP Kosova A and TPP Kosova B from transmission represent the amounts withdrawn from the transmission system for generation purposes.
**Shortages occur due to lack of power in certain months of the winter season and due to overhauls of generating units.
***Redundancies (export) usually occur in summer and as residuals of the night.

6.3. Forecast of energy imports in 2014

Of the forecasted total demand of primary energy sources in 2015 in Kosovo (2503.02 ktoe), a considerable amount will be imported. In reality, 28% of the gross energy available in Kosovo is imported. Mostly such import includes petroleum, electricity, coal and some amount of coal biomass. Planned imported energy amounts to 698.01 ktoe.

Energy related imports are dominated by petroleum – 641.29 ktoe or 91.87% of the overall imported energy. Electricity imports are planned to reach 43.68 ktoe, or 6.26% of the imported energy, while coal imports will be 12.29 ktoe or 1.76%, and biomass will amount to 0.74 ktoe or 0.11 %.

The following table represents the forecast of energy source imports for 2015:

Table 12: Overview of the forecast of imports of energy products in 2015 (ktoe)

Petroleum products	Electricity	Coal	Biomass	Total
641.29	43.68	12.29	0.74	698.01
91.87%	6.26%	1.76%	0.11%	100%

Following is an overview of the forecast of coal generation, consumption and reserves in 2015, for the use of existing thermal power plants**:**

Table 13: Forecast coal generation, consumption and reserves in 2014, for the use of TPPs

DINAMIKA E PRODHIMIT DHE KONSUMIT TE QYMYRIT TE NJOMË ME GJENDJE NE DEPO

(ton)

2014 **Gjendja me: 31.12.13**

KEK	Coal generation			Coal consumption				DEPOT	DEPOT A	DEPOT B
	Sitnica	SJP	Total	TC A	TC B	TC A+B	Market	600 000	250 000	350 000
1	70 000	630 000	**700 000**	303 075	504 842	**807 917**	**10 000**	**480 966**	192 386	288 580
2	60 000	600 000	**660 000**	273 759	454 385	**728 144**	**10 000**	**401 857**	160 743	241 114
3	70 000	650 000	**720 000**	263 982	504 842	**768 824**	**10 000**	**341 930**	136 772	205 158
4	70 000	640 000	**710 000**	254 205	252 421	**506 626**	**10 000**	**366 105**	146 442	219 663
5	80 000	650 000	**730 000**	263 982	395 460	**659 442**	**10 000**	**569 156**	227 663	341 493
6	70 000	630 000	**700 000**	254 205	488 013	**742 218**	**10 000**	**532 736**	213 094	319 642
7	80 000	620 000	**700 000**	263 982	488 013	**751 995**	**10 000**	**570 865**	228 346	342 519
8	0	600 000	**600 000**	263 982	201 937	**465 918**	**25 000**	**595 186**	238 074	357 114
9	0	650 000	**650 000**	254 205	395 459	**649 664**	**25 000**	**476 900**	190 760	286 140
10	0	730 000	**730 000**	263 982	504 842	**768 824**	**10 000**	**426 973**	170 789	256 148
11	0	750 000	**750 000**	293 314	420 701	**714 015**	**10 000**	**536 368**	214 547	321 821
12	0	750 000	**750 000**	303 091	504 842	**807 933**	**10 000**	**467 334**	186 934	280 400
Total	**500 000**	**7 900 000**	**8 400 000**	**3 255 763**	**5 115 757**	**8 371 520**	**150 000**	**467 334**	186 934	280 400

7. Forecast of pollutant emissions from thermal power plants

Main air pollutants from thermal power plants are the following combustion-related products:

- Ash
- SO_2gas
- NO_xgas
- CO_2gas

7.1. Specific emissions from TPP Kosova A

Following is the forecast of specific emissions from thermal power plant Kosova A in 2015:

Table 14. Forecast of specific emissions from TPP Kosova A

2015	Generation in the unit	Dust	SO2	Nox	CO2 (t)	Ash produced
Month	MWh	kg	kg	kg/MWh	kg	
January	119,392	59,818	602,163	777,628	293, 105,810	53,836
February	180,104	54,031	543,915	702,407	264, 753,449	48,628
March	173,672	52,102	524,490	677,322	255, 298,208	46,892
April	167,240	50,172	505,065	652,236	245, 842,966	45,155
May	173,672	52,102	524,490	677,322	255, 298,208	46,892
June	167,240	50,172	505,065	652,236	245, 842,966	45,155
July	173,672	52,102	524,490	677,322	255, 298,208	46,892
August	173,672	52,102	524,490	677,322	255, 298,208	46,892
September	167,240	50,172	505,065	652,236	245, 842,966	45,155
October	173,672	52,102	524,490	677,322	255, 298,208	46,892
November	192,970	57,891	582,769	752,582	283, 655,603	52,102
December	199,402	59,821	602,194	777,668	293, 120,845	53,839
Total	**2, 141,949**	**642,585**	**6, 468,686**	**8, 353,603**	**3,148, 655,645**	**578,330**

7.2. Specific emissions from TPP Kosova B

Following is the forecast of specific emissions from thermal power plant Kosova B in 2015:

Table 13. Forecast of specific emissions from TPP Kosova B

2014	Elec. Generation in the unit	Dust	SO2	Nox	CO2	Ash produced
Month	MWh	kg	kg	kg/MWh	kg	
January	413,805	910,371	1, 200,035	1, 406,937	434, 495,338	77,795
February	372,446	819,382	1, 080,095	1, 266,318	391, 068,802	70,020
March	413,805	910,371	1, 200,035	1, 406,937	434, 495,338	77,795
April	206,903	455,186	600,017	703,469	217, 247,669	38,898
May	324,148	713,125	940,028	1, 102,102	340, 354,952	60,940
June	400,011	880,024	1, 160,031	1, 360,037	420, 011,308	75,202
July	400,011	880,024	1, 160,031	1, 360,037	420, 011,308	75,202
August	165,522	364,148	480,013	562,774	173, 797,903	31,118
September	324,146	713,122	940,025	1, 102,098	340, 353,791	60,940
October	413,805	910,371	1, 200,035	1, 406,937	434, 495,338	77,795
November	344,837	758,641	1, 000,027	1, 172,445	362, 078,674	64,829
December	413,805	910,371	1, 200,035	1, 406,937	434, 495,338	77,795
Total	**4, 193,244**	**9, 225,136**	**12, 160,407**	**14, 257,028**	**4,402, 905,759**	**788,329**

8. Indicators of thermal power plant energy efficiency

- Improvement of coal quality
- Diminishment of specific coal expenditure in TPP A and TPP B, ton/MWh
- Diminishment of own-expenditure of electricity, TPP A, TPP B and Mines
- Diminishment of specific fuel expenditure, liter of petroleum/MWh in TPP A, and ton of heavy duty oil/MWh in TPP B, without affecting unplanned interruptions in generation
- Delivery of adequate quality spare parts
- Maintenance and operation at the required technical standard
- Conduct of timely and qualitative overhauls

Content of coal in mines:

- Low thermal combustion values 6700 – 9210 kJ/kg, projected value 7325.5 kJ/kg
- Ash content 14 – 21 %
- Humidity content 38 – 47 %
- Content of sulfur during combustion is 0.3 %

Calculation of energy efficiency coefficient at the threshold shall be:

- Calculated at the value of the low thermal combustion value of the coal Kc=1863kcal/kg= 7800 kJ/kg
- Specific expenditure of coal in TPP Kosova A 1.52 ton/MWh in the generator
- Specific expenditure of coal in TPP Kosova B 1.22 ton/MWh in the generator

Calculation of the energy efficiency coefficient of thermal power plants Kosova A and B:

TPP Kosova A $\eta = 7800 * 1.52*1 = 11856$ kJ/kWh
$Ef = Ed/ \eta * 100 = 3600/11856 = 30.36$ %

TPP Kosova B $\eta = 7800 * 1.22 = 9515$ kJ/kWh
$Ef = Ed / \eta * 100 = 3600/8516 = 37.83$ %

For 2015, the specific consumption of coal per MWh is smaller compared with that of 2014 considering that the coal calorific value of 7800 kJ / kg is higher compared to the previous year of 7325 kJ / kg. Increasing caloric value is the result that in 2015 coal will be used with better quality.
In this case, the specific consumption of coal in generator for 2015 will be as follows:

- TPP Kosova A – 1.52 t/MWh
- TPP Kosova B – 1.22 t/MWh

It is worth mentioning that the reduction of specific coal consumption will also affect capital repairs which are being committed in Kosovo A and Kosovo B this year.

Annexes

Annex 1. Overview of installed capacities of TPP Kosova A and B, and Kosovo Coal J.S.C.

Generators	Starting date	Installed capacities		Technical minimum		Possible power		Technical minimum	
		In the generator	At the threshold	In the generator	At the threshold	In the generator	At the threshold	In the generator	At the threshold
	year	MW	MW	MW	MW	MW	MW	MW	MW
A1	1962	65	58	40	36	0	0	0	0
A2	1964	125	112	78	70	0	0	0	0
A3	1970	200	138	138	125	160	144	135	120
A4	7941	200	138	138	125	160	144	135	120
A5	1975	210	138	138	125	160	144	135	120
Kosovo A		**800**	**584**	**532**	**481**	**480**	**432**	**405**	**360**
B1	1983	339	305	182	164	300	270	220	200
B2	7984	339	305	182	164	300	270	220	200
Kosovo B		**678**	**610**	**364**	**328**	**600**	**540**	**440**	**400**
Kosovo Coal J.S.C	1970	25				**0**	**0**	**0**	**0**
	1970	16				**0**	**0**	**0**	**0**
Kosova A and B plus Coal		**1519**	**1194**	**896**	**809**	**1080**	**972**	**845**	**760**

Annex 2. Overview of installed capacities of hydro and wind-powered power plants

HPP	Generator	Year of commissioning	Visible power MVA	Installed apacity MW	(MW)	Minimum water quota
HPP Ujmani	G1	1981	19.5	17.5	16	638
	G2	1981	19.5	17.5	16	
Total			**39**	**35**	**32**	
HPP Lumbardhi	G1	1957/2005	5.05	4.04	4.00	cosφ=0,8
	G2	1957/2005	5.05	4.04	4.00	cosφ=0,8
EGU Belaja	G1	2015	5.88	4.7		cosφ=0,8
	G2	2015	3.11	2.49		cosφ=0,8
EGU Decani	G1	2015	11.24	8.99		cosφ=0,8
	G2	2015	5.47	4.38		cosφ=0,8
Total			**35.8**	**28.64**	**8.00**	

			Visible power MVA	Active power (MW)	rotations per minute	H of the pressure pool
Radavc	G1	1934/rindertimi 2010	0.5	0.45	1000	34,44m
	G2	1934/rindertimi 2010	0.5	0.45	1000	34,44m
Total			**1**	**0.9**		
Burim	G1	1948/rindertim 2011	0.475	0.427	1000	29,5m
	G2	1948/rindertim 2011	0.475	0.427	1000	29.5m
Total			**0.95**	**0.854**		
Dikanci	G1	1957/riparim faza 1-2010	0.55	0.5	1000	115m
	G2	1957/riparim faza 1-2010	0.55	0.5	1000	115m
Total			**1.1**	**1.0**		

Renewable sources	Generator	Year of commissioning	power in MW
Wind-powered generators	G1	2010	0.45
	G2	2010	0.45
	G3	2010	0.45
Total			**1,35**

Annex 3. Characteristics of energy sources and unit conversion

Unit conversion

	kcal	kJ	kWh	kgoe
1 kcal	1	4.1871	0.001163	0.0001
1kJ	0.2388	1	0.000278	0.0239×10^{-3}
1kWh	860	3600	1	0.086
1kgoe	10000	41871.4	11.62	1

Characteristics of energy sources

Type of energy	Unit	kJ	kgoe	toe	ktoe
Anthracite	kg	27,000.00	0.645	6.45E-07	27,000.00
Bitumen and other coal	kg	20,125.00	0.481	4.81E-04	4.81E-07
Coal stones 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
Coke terpenine from tar and 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 briquette	kg	20,014.53	0.478	4.78E-04	4.78E-07
Soot	kg	10,802.82	0.258	2.58E-04	2.58E-07
White fuels	kg	43,600.00	1.041	1.04E-03	1.04E-06
Aviation fuel	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
Petroleum oil/heavy oil	kg	39,610.34	0.946	9.46E-04	9.46E-07
Diesel	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
Diesel 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
Biofuels	kg	6,168,000.00	0.874	8.74E-04	8.74E-07
Gained heat	kWh	3,600.00	0.086	8.60E-05	8.60E-08
Electricity	kWh	3,600.00	0.086	8.60E-05	8.60E-08

Annex4. Projects envisaged in 2015

I. Continuation of projects from 2014:

1. Rehabilitation of HV facilities in SS 110/10 kV Gjakova 2 - financed by KOSTT

According to the most recent dynamic plan, the project is envisaged to conclude by Q2 2015 (04.05.2015).

As regards 2014, it is expected for three field lines and the connection field to be commissioned, whereas regarding transformation fields, it remains to be seen whether there are rehabilitation possibilities, knowing that additional works have affected the competition of all equipment and their rehabilitation.

According to the most recent dynamic plan provided by the contractor, it is envisaged that one transformation field will be rehabilitated during the period 13.10.2014 - 26.12.2014, whereas the other rehabilitation will be performed between 27.12.2014 and 16.03.2015, however, bearing in mind that the second implementation period falls during the winter season, it is clear that the implementation of some disconnections will be problematic.

Implementation of disconnections required for works in the transformation field

2. Rehabilitation of HV facilities in SS 110/10 kV Prizren 3 - financed by KOSTT

According to the most recent dynamic plan, the project is envisaged to conclude by Q2 2015 (07.05.2015).

As regards 2014, it is expected that two line fields and the connection field will be commissioned, whereas regarding transformation fields, it remains to be seen when they can be rehabilitated, knowing that additional works have affected the completion of all equipment required for their rehabilitation.
According to the most recent dynamic plan provided by the contractor, it is envisaged for one transformation field to be rehabilitated during the period 16.10.2014 - 30.12.2014, whereas the other will be performed between 31.12.2014 and 16.03.2015, however, bearing in mind that the second implementation period falls during the winter season, it is clear that the implementation of some disconnections will be problematic.
Implementation of disconnections required for works in the transformation field

3. Rehabilitation of medium voltage equipment 35kV in transformation fields in SS Gjakova 1

Rehabilitation of medium voltage equipment (35kV) in transformation fields in SS Gjakova 1 includes replacement of medium level voltage equipment (35kV - PTM), namely the divider, switch, isolator, reactive resisters, relay protection, monitoring)

Date of project commencement: 10.03.2014;
Date of project conclusion: 20.02.2015 and pursuant to the contract, the implementation period shall be 240 work days.

Implementation of disconnections required for works in the transformation field

4. Construction of OHL 400kV Kosovo – Albania (LOT1)

Project will be implemented up to Q1 of 2016

4.1 Secondary legislation LFC (LOT2)

For the realization of secondary LFC regulation through the existing OHL 2303 line with Albania, OPGW needs to be installed, therefore a connection of the OHL is required.

Implementation of disconnection in Q1-Q2 2015. Works to be completed by end-2015.

5. Installation of metering groups, as per the new KOSTT/KEDS boundary

In each the transformation fields of all SS 110/35/10(20)kV, new voltage metering transformers and power metering transformers are to be installed in accordance with the new commercial boundary; changes will be implemented in substations and new relay protection equipment will be installed in 10 substations.

The project is undergoing procurement procedures and will be implemented during a two-year period Q3 2014- Q3 2016, whereas disconnections will be required for all transformation fields of all SS 110kV

As per the midterm planning, disconnections can be implemented only during Q2 and Q3

II. Projects for enhancement of transformation capacities, which are expected to be commissioned by Q2-Q3 2015

6. Installation of TR2 in SS 110/10(20) kV Skenderaj, with installed capacities of 40MVA

Installation of TR 2 in SS 110/10(20) kV Skenderaj, with installed capacities of 40MVA (complete with the transformation field). According to the dynamic plan for implementation of the "Installation of the second transformer TR 2, 40 MVA in SS Skenderaj" project, its commissioning is envisaged on 26.10.2015.

7. Installation of TR 2 in SS 110/10(20) kV Burimi, with installed capacities of 40 MVA

Installation of TR 2 in SS 110/10(20)kV Burimi, with installed capacities of 40MVA (complete with the transformation fields 110kV and 10(20)kV). According to the dynamic plan of the implementation of "Installation of a second transformer TR 2, 40MVA in SS Burim" project, its commissioning is envisaged on 26.10.2015.

8. **Installation of TR 3 in SS 110/10(20) kV Prishtina 2, with installed capacities of 40MVA**

Installation of TR 3 in SS 110/10(20) kV Prishtina 2, with installed capacities of 40MVA (complete with the transformation fields 110kV and 10(20)kV). This project is envisaged to commence in 2014 and will be commissioned by end-2015.

9. **Installation of a repaired TR2 transformer in SS 110/10(20) kV Berivojcë and SS 110/35kV Viti**

Installation of two repaired TR2 transformers, envisaged to be transported and installed in substations SS 110/10(20)kV, Berivojcë and SS 110/35kV Viti.

- Repaired TR 31.5MVA transformer, 110/10kV, will be transported and installed in SS Berivojcë.
- Repaired TR 31.5MVA transformer, 110/35kV, will be transported and installed in SS Viti.

Projects above shall commence in Q2 2014 and conclude in (Q2– Q3)2015

10. **Inclusion of all changes in existing substations and incorporation of new substations in SCADA/EMS in the Dispatch Center and Emergency Dispatch Center**

According to the investment plan, this project will be finalized by Q4 2016

III. ***Projects planned to commence in Q2 2015***

11. **Revitalization of substation SS 110kV, 35 kV side in SS Gjilani 1**

If the bidding process is conducted properly, the project can commence in Q2 2015.

According to the investment plan, the project should be finalized by Q4 2015.

12. **Installation of a second automatic transformer ATR2, 300MVA in SS Peja 3 and SS Ferizaji 2 & advisory services (IPA 2011/2012)**

Currently technical specifications of the project are being prepared, whereas the bidding process will be conducted in 2015. Project implementation envisaged to commence in Q3 2015.

13. Installation of OPGW in 400kV interconnection lines 400 kV, 220 kV, 110 kV & advisory services

OPGW installation planned in:
OHL 407 SS Kos B – SS Nish and
OHL 1140/2 SS Berivojcë – SS Bujanovc
Currently technical specifications of the project are being prepared, whereas the bidding process will be conducted in 2015.

Project implementation expected to commence in Q3 2015, whereas its finalization is expected in 2016.

14. Inter OST – meters and advisory services

Installation of new metering groups in interconnection points in SS Kos B, SS Besianë, SS Feronikël, SS Ujman, SS Vallaq

According to the investment plan, the project will commence in Q3 and will be finalized in 2016.

Annex5. 2015 Annual Energy Balance

Annual Energy Balance for 2015 (ktoe)	Total of all products	Anthracite	Bituminous coal and other coal	Coking coal	Lignite/Brown coal	Coke and semi coke	Coal gas.water gas,etc.	Pitch coke	Brown Coal Briquettes	Tar	Peat	Total coal
Primary production	1830.65				1562.40							1562.40
Generated products	0.00											0.00
Imports	698.01	0.00	11.15	0.00	0.58	0.07	0.00	0.00	0.02	0.00	0.48	12.29
Stock changes	24.68				24.68							24.68
Exports	50.32	0.00	0.01	0.00	2.81	0.00	0.00	0.00	0.00	0.00	0.00	2.81
Bunkers	0.00											0.00
Inputs in transformation	2503.02	0.00	11.14	0.00	1584.85	0.07	0.00	0.00	0.02	0.00	0.48	1596.56
Gross inland production	1551.90	0.00	0.00	0.00	1540.45	0.00	0.00	0.00	0.00	0.00	0.00	1540.45
Public power plants	1547.38				1540.45							1540.45
Auto production power plants	0.00											0.00
Nuclear power plants	0.00											0.00
Power plants with patented fuel and briquette	0.00											0.00
Cox furnaces	0.00											0.00
Martin furnaces	0.00											0.00
Gasification	0.00											0.00
Refinery	0.00											0.00
Concentrated heating plants	3.81											0.00
Solar equipment	0.71											0.00
Outputs from transformation	557.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power plants	544.83											0.00
Auto production power plants	0.00											0.00
Nuclear power plants	0.00											0.00
Power plants with patented fuel and briquette	0.00											0.00
Cox furnaces	0.00											0.00
Martin furnaces	0.00											0.00
Gasification	0.00											0.00
Refinery	0.00											0.00
Concentrated heating plants	12.46											0.00
Solar equipment	0.71											0.00
Exchanges and transfers,returns	0.00											0.00
Inter-production transfer	0.00											0.00
Transferred procucts	0.00											0.00
Returning to petrochemical energy	0.00											0.00
Losses in transformation	0.00											0.00
Consumption in energy sector	46.84											0.00
Losses in transmission and distribution	60.89											0.00
Available for final consumption	1401.11	0.00	11.14	0.00	44.40	0.07	0.00	0.00	0.02	0.00	0.48	56.11
Final non energy consumption	50.24									0.00	0.48	0.48
Chemical industry	0.48									0.00	0.48	0.48
Other sectors	49.77									0.00	0.00	0.00
Final energy consumption	1355.82	0.00	11.14	0.00	49.36	0.07	0.00	0.00	0.02	0.00	0.00	60.59
Industry	320.33	0.00	11.05		23.62	0.07						34.75
Iron and steel	91.08	0.00	11.02		17.95	0.07						29.04
Non-ferrous metal industry	22.06	0.00			0.00							0.00
Chemical industry	1.56				0.00							0.00
Glass,ceramics&construction material industry	93.29				0.11							0.11
Excavating industry	2.14				0.00							0.00
Food ,drinks&tabacco industry	63.01	0.00	0.03		5.46							5.49
Textile ,leather and clothing	0.13				0.00							0.00
Paper and printing	0.42				0.09							0.09
Engineering&other metallic industries	0.00				0.00							0.00
Other industry	46.63				0.02							0.02
Transport	340.44											0.00
Railwey	1.29											0.00
Road transport	323.05											0.00
Air	16.10											0.00
Other transport	0.00											0.00
Houshold	533.03			0.00	18.44				0.02			18.46
Agriculture	31.19				0.66							0.66
Services	130.83		0.09		6.63	0.00						6.72
Statistical difference	-4.96	0.00	0.00	0.00	-4.96	0.00	0.00	0.00	0.00	0.00	0.00	-4.96

Annual Energy Balance of the Republic of Kosovo for the year 2015

Annual Energy Balance for 2015 (ktoe)	Gasoline	Kerosene	Fuel oils	Diesel	LPG	Petroleum Cokes	Other petroleum products	Lubricants	Residual oil	Bitumen	Total oil products
Primary production						0.00					0.00
Generated products											0.00
Imports	62.82	16.10	29.22	339.27	43.87	98.78	0.00	4.88	0.00	46.34	641.29
Stock changes											0.00
Exports	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.02	0.00	1.44	1.92
Bunkers											0.00
Inputs in transformation	62.82	16.10	29.22	339.27	43.87	98.31	0.00	4.86	0.00	44.91	639.37
Gross inland production		0.00	8.18	2.56			0.00			0.00	10.74
Public power plants			4.37	2.56							6.93
Auto production power plants											0.00
Nuclear power plants											0.00
Power plants with patented fuel and briquette											0.00
Cox furnaces											0.00
Martin furnaces											0.00
Gasification											0.00
Refinery											0.00
Concentrated heating plants			3.18								3.81
Solar equipment											0.00
Outputs from transformation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power plants											0.00
Auto production power plants											0.00
Nuclear power plants											0.00
Power plants with patented fuel and briquette											0.00
Cox furnaces											0.00
Martin furnaces											0.00
Gasification											0.00
Refinery											0.00
Concentrated heating plants											0.00
Solar equipment											0.00
Exchanges and transfers,returns		0.00					0.00	0.00		0.00	0.00
Inter-production transfer											0.00
Transferred procucts											0.00
Returning to petrochemical energy											0.00
Losses in transformation		0.00					0.00	0.00		0.00	0.00
Consumption in energy sector											0.00
Losses in transmission and distribution											0.00
Available for final consumption	62.82	16.10	21.04	336.71	43.87	98.31	0.00	4.86	0.00	44.91	628.62
Final non energy consumption	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.86	0.00	44.91	49.77
Chemical industry		0.00					0.00			0.00	0.00
Other sectors		0.00					0.00	4.86		44.91	49.77
Final energy consumption	62.82	16.10	21.04	336.71	43.87	98.31	0.00	0.00	0.00	0.00	578.85
Industry	0.49	0.00	14.52	26.53	9.94	98.31	0.00	0.00	0.00	0.00	149.79
Iron and steel	0.00		0.00	0.54	0.00	11.68	0.00			0.00	12.21
Non-ferrous metal industry	0.00		12.72	7.73	0.03	0.00	0.00			0.00	20.48
Chemical industry	0.02		0.00	0.04	1.21	0.00	0.00			0.00	1.28
Glass,ceramics&construction material industry	0.31		1.16	12.87	6.15	66.16	0.00			0.00	86.66
Excavating industry	0.01		0.35	0.39	0.00	0.00	0.00			0.00	0.75
Food ,drinks&tabacco industry	0.12		0.15	3.67	2.43	0.00	0.00			0.00	6.37
Textile ,leather and clothing	0.00		0.00	0.01	0.00	0.00	0.00			0.00	0.01
Paper and printing	0.00		0.00	0.07	0.01	0.00	0.00			0.00	0.08
Engineering&other metallic industries	0.00		0.00	0.00	0.00	0.00	0.00			0.00	0.00
Other industry	0.03		0.15	1.19	0.11	20.47	0.00			0.00	21.95
Transport	57.99	16.10	0.00	225.16	11.19	0.00	0.00	0.00	0.00	0.00	340.44
Railwey	0.00	0.00	0.00	1.29	0.00	0.00	0.00			0.00	1.29
Road transport	57.99	0.00	0.00	253.87	11.19	0.00	0.00			0.00	323.05
Air	0.00	16.10	0.00		0.00	0.00	0.00			0.00	16.10
Other transport	0.00	0.00	0.00		0.00	0.00	0.00			0.00	0.00
Houshold	3.02	0.00	0.00	4.70	9.89	0.00	0.00	0.00	0.00	0.00	17.61
Agriculture	1.13	0.00	0.05	27.36	0.00	0.00	0.00	0.00	0.00	0.00	28.54
Services	0.19	0.00	6.47	22.95	12.85	0.00	0.00	0.00	0.00	0.00	42.46
Statistical difference	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual Energy Balance of the Republic of Kosovo for the year 2015

Annual Energy Balance for 2015 (ktoe)	Biomass	Biofuel	Hydroenergy	Solar energy	Geothermal energy	Wind energy	Heating	Electric energy
Primary production	256.26		11.02	0.71	0.00	0.27		
Generated products								
Imports	0.74	0.00	0.00					43.68
Stock changes								
Exports	1.27	0.00	0.00					44.31
Bunkers								
Inputs in transformation	255.73	0.00	11.02	0.71	0.00	0.00		-0.63
Gross inland production	0.00	0.00	0.00	0.71		0.00		0.00
Public power plants								
Auto production power plants								
Nuclear power plants								
Power plants with patented fuel and briquette								
Cox furnaces								
Martin furnaces								
Gasification								
Refinery								
Concentrated heating plants								
Solar equipment				0.71				
Outputs from transformation	0.00	0.00	0.00	0.71	0.00	0.00	12.46	544.83
Power plants								544.83
Auto production power plants								
Nuclear power plants								
Power plants with patented fuel and briquette								
Cox furnaces								
Martin furnaces								
Gasification								
Refinery								
Concentrated heating plants							12.46	
Solar equipment				0.71				
Exchanges and transfers,returns	0.00		-11.02		0.00	0.00		11.02
Inter-production transfer			-11.02			0.00		11.02
Transferred procucts								
Returning to petrochemical energy								
Losses in transformation	0.00							
Consumption in energy sector							1.06	45.78
Losses in transmission and distribution							2.19	58.70
Available for final consumption	255.73	0.00	0.00	0.71	0.00	0.00	9.21	450.74
Final non energy consumption	0.00							0.00
Chemical industry	0.00							
Other sectors	0.00							
Final energy consumption	255.73	0.00	0.00	0.71	0.00	0.00	9.21	455.74
Industry	14.09	0.00	0.00		0.00	0.00		126.70
Iron and steel	0.30							49.53
Non-ferrous metal industry	0.00							1.58
Chemical industry	0.04							0.24
Glass,ceramics&construction material industry	0.56							5.96
Excavating industry	0.05							1.34
Food ,drinks&tabacco industry	5.63							45.52
Textile ,leather and clothing	0.00							0.12
Paper and printing	0.01							0.24
Engineering&other metallic industries	0.00							0.00
Other industry	7.50							17.16
Transport	0.00	0.00	0.00		0.00	0.00		0.00
Railwey								
Road transport		0.00						
Air								
Other transport								
Houshold	233.93	0.00	0.00	0.21	0.00	0.00	5.99	256.84
Agriculture	0.56	0.00	0.00	0.00	0.00	0.00		1.43
Services	7.16	0.00	0.00	0.50	0.00	0.00	3.22	70.77
Statistical difference	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00