Kosovo Civil Society Consortium for Sustainable Development
(KOSID)

Electricity Score

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KOSID
KOSOVO CIVIL SOCIETY CONSORTIUM FOR SUSTAINABLE DEVELOPMENT
KONSORCIUMI KOSOVAR I SHOQËRISË CIVILE PËR ZHVILLIM TË QËNDRUESHËM

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1. Introduction

Prices of energy in Kosovo went up several times during the past decade. In 2012 alone, electricity bills of Kosovo citizens went up for 8.9%. The trend of electricity becoming more expensive does not match the trend of economic growth of the country. According to preliminary indications, electricity prices will continue to rise during the coming years as well, making the situation even more difficult for Kosovo citizens to afford their electricity bills.

To address this concern of citizens, Kosovo Civil Society Consortium for Sustainable Development (KOSID) will conduct a series of brief policy studies, which aim at influencing public policies in Kosovo and providing solutions for households to be able to afford higher electricity prices.

The Kosovo Government has constantly alluded to the fact that prices in Kosovo are very low and that they cannot stop them from rising. KOSID considers that it is an obligation of the national institutions that through public policies to enable citizens to have access to electricity and to be able to pay for it.

In this first study, KOSID will analyse the reasons behind price increases as well as electricity costs in Kosovo. We will explain which factors have kept the electricity price low so far, how much it will cost in the future, who spends electricity in Kosovo and when that electricity is spent. Further, we will look into energy efficiency measures and we will try to forecast how affordable will electricity bills will be for Kosovo citizens.

2. How much did electricity cost previously?

Since the post-war period, Kosovo citizens have paid relatively low electricity prices. In 2011, the average electricity price in Kosovo, without tax, according to the Energy Regulatory Office (ERO) was 5.78 euro cents per KWh. Compared to other countries in the region, Kosovo pays more per KWh than Macedonia and Serbia, less than Albania, Bosnia and Herzegovina and Montenegro. Compared to the citizens of the 27 European Union Countries, who pay an average of 14.16 euro cents, Kosovo pays about three times less.

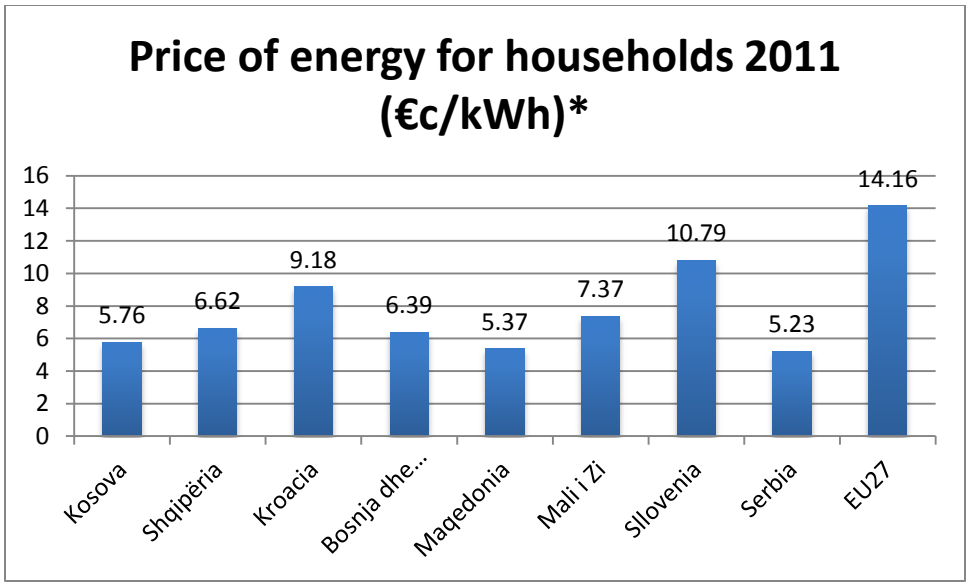


Figure 1 – Comparison of electricity prices, without tax, for households. Sources: ERO, Eurostat and Serbia's Energy Agency.

However, this electricity price in Kosovo was not real but virtual, mainly due to the lack of calculation of full production costs and large subsidies from the Kosovo Government to KEK. Actual electricity cost is even higher if we calculate about 1 billion Euros that were invested by various donors in KEK since 1999[1], investments which are not calculated as a type of investment and depreciation of invested assets.

According to KEK, the production of one MWh electricity in Kosovo used to cost about 25 euros, which is 2.5 euro cents per KWh.[2] According to this calculation, the prices that consumers paid, calculating here transmission and distribution costs, seem to have been proportional to production cost. However, this production cost was mainly virtual. First of all, the exploitation of lignite was not calculated into the price according to its price in regional or European market.[3] Since KEK, as a publicly-owned company, had a type of monopoly in the use of natural resources of lignite, the actual cost of its exploitation was never calculated.

[1] Lavdim Hamidi, Kosovo: Power Games Delay Escape from Poverty, BIRN, 2008, http://fellowship.birn.eu.com/en/fellowship-programme/topic-2008-power-struggle-kosovo-power-games-delay-escape-from-poverty

[2] KEK Annual Reports between 2008-2011 as well as numerous statements of KEK and MED officials.

[3] See Alternatives for sustainable energy in Kosovo, a report of the Renewable Energy Lab at the University of California– Berkeley, http://rael.berkeley.edu/kosovoenergy

Old generation technology through which about 98% of the electrical energy in Kosovo is produced creates the situation where production cost does not calculate asset depreciation. Additionally, depreciation is not calculated at all for assets that entered KEK as a donation.

The lack of calculation of cost for burning of lignite and the damage that this process poses to the environment and society has also affected the virtual reduction of electricity price. Subsequently, the production cost, and according to it, the cost of electricity collection rates, did not calculate any Government investment into KEK. Secondly, according to World Bank studies, every year about 835 Kosovo citizens die an early death due to air pollution[4]. Largest air pollutants in Kosovo include primarily lignite-based thermal power-plants. Since KEK as a public corporation does not have social responsibility for the damage it has caused from its electricity generation operations, the generation cost does not calculate any of the external production costs. As a result, the cost has been way higher than stated.

If the electricity cost was higher than the one that was invoiced to citizens, the logical question that follows is: who has paid the remaining part of the bill? Besides direct damage to the environment and society, Kosovo citizens have paid the remainder of the bills through their taxes that are collected by the Government. During 2009-2011 alone, KEK was given about 146 Million Euros in subsidies from the Government[5]. Subsidy policy did not only derive from the Kosovo Government and various donors, but from the ERO itself as well. The cost of electricity for households was 'under-subsidized' through the electricity cost for commercial operators.[6] This under-subsidy means that the price for commercial operators was higher while the price for households was lower. Even though this is considered as part of the public policy to make electricity more affordable for citizens, such an increase for commercial operators resulted with higher prices for services and products of those operators, prices which at the end of the day are also charged to and paid by citizens. Simultaneously, higher prices for commercial operators also result with a more difficult situation for development of the private sector in Kosovo.

[4] World Bank – Kosovo CEA (Country Environmental Analysis) http://siteresources.worldbank.org/INTKOSOVO/Resources/KosovoCEA.pdf
[5] Annual Reports of ERO, 2009-2011.
[6] Ibid.

3. Why will prices rise?

With the privatization of the energy sector in Kosovo, energy prices are expected to rise. A rough KOSID calculation shows that in 2016, electricity bills will be many times higher than those in 2011.[7]

First of all, Government subsidies for KEK are expected to be fully eliminated by 2015. After privatization, with the construction of new generating capacities, whatever they will be, the cost of assets' depreciation will constitute the largest portion of the bill that will be charged to citizens. At the same time, as a result of citizens' awareness rising on side effects of electricity generation, be them either environmental or health-related, as well as due to requirements to respect European directives, generation capacities will be required to invest in protection measures accordingly. This includes the reduction of the emission of toxic gases, control of air, soil and water pollution, adequate management of generation waste as well as other protection measures according to European standards. These changes will create the situation where the price of electricity will reflect actual cost of the electricity, which means the increase of electricity prices.

In addition to reflection of the overall production costs, electricity prices are also expected to go further up due to market liberalization, which is a requirement of the Energy Community Treaty, which was signed by Kosovo in 2005.[8] As a result, the electricity price will approximately be similar to the one in region. Kosovars, who until now have paid relatively low electricity bills compared to citizens of the regional countries, will face a further increase of the prices at the time when liberalization happens.

KOSID strongly supports a free market in the energy sector, since in the majority of countries, market liberalization allows for the energy price to be determined by the ratio between demand and supply. However, with two large privatization projects in the energy sector, the Kosovo Government has not paved the way for proper competition in the energy sector. Sale of the distribution and supply network to a single company, which is later expected to face competition in supply, while maintaining the monopoly over the distribution network, does not pose a sound premise for a free market. Furthermore, due to virtual prices that were elaborated above, liberalization in Kosovo will not bring lower prices, as it usually does, but will only raise them.

[7] Institute for Development Policy and Sierra Club, Kosovo Needs Clean Energy, Not New Coal, 2012 http://www.kosid.org/wp-content/uploads/2012/09/Facts-on-New-Kosovo-Power-Plant-May-2012.pdf

[8] The Energy Community Treaty http://europa.eu/legislation_summaries/enlargement/western_balkans/l27074_en.htm

4. Affordability of energy prices

All statistics show that about 40% of the labour force in Kosovo are unemployed[9], while, according to the World Bank, 16% of the population live in extreme poverty on less than 1 US Dollar a day.[10] In the past decade, the economic growth in Kosovo, which is measured as a growth in Gross Domestic Product (GDP), in past five years has been about 6%[11]. While this growth rate would be very satisfactory for developed countries, for Kosovo with 1.8 million residents whose output totals 6.7 billion dollars a year, it does not mean much.[12] This economic growth, irrespective of how little, is not affected much by production industries. The three most important factors of economic growth include: investments in the public sector that constitute 12% of the GDP, remittances from Diaspora (14% of the GDP), and financial support from various donors (7.5% of the GDP). None of these three factors represents a sustainable ground for economic growth and social development.

Due to lacking a proper strategy for sustainable development, energy bills will continue to be an important burden for Kosovo citizens. In 2011, one Kosovo family spent not more than 1,210 euro per year, or about 100 euro a month on energy bills.[13] According to Agency of Statistics of Kosovo, about 38% of the family costs are spent on food, while about 31% on accommodation costs, where the energy bill is one of the main components of the cost. This phenomenon shows that an increase in one of the categories of the cost would substantially affect family costs. Therefore, an increase of the energy cost will substantially affect the welfare of citizens.

Affordability of the energy costs may influence a clearer articulation for all other social dissatisfactions. Such dissatisfactions have already been expressed in the form of protests that lasted for several weeks in a row on the case of the 'inflation' of electricity bills during January 2013.[14] In the future, this may affect expansion of other social and political dissatisfactions in Kosovo.

[9] Kosovo Population and Housing Census 2011, http://esk.rks-gov.net/rekos2011/
[10] World Bank data, http://databank.worldbank.org/data/views/reports/tableview.aspx
[11] IMF – 2011 Article IV Consultation Report for the Republic of Kosovo
[12] Ibid
[13] Kosovo Statistics Agency, Results of Household Budget Survey, 2012
http://esk.rks-gov.net/ENG/hbs/publications/doc_view/1092-results-of-household-budget-survey-2012?tmpl=component&format=raw
[14] Koha Portal, Mijëra protestues në marshin "Kundër hajnisë – për zhvillimin e shtetit" [Thousands of protesters in march "Against thieves – for development of the state"], 2013
http:// koha.net/?page=1,13,138387

5. Who spends electricity?

As a developing country, Kosovo does not possess a developed industry sector. As a result, contrary to developed nations, most of the electricity in Kosovo is spent by households. According to ERO data, about 55% of electricity in Kosovo is spent for household needs, 25% for industry needs and 17% for the commercial sector. KEK itself spends about 3% of electricity for its own operational needs in mines and distribution.

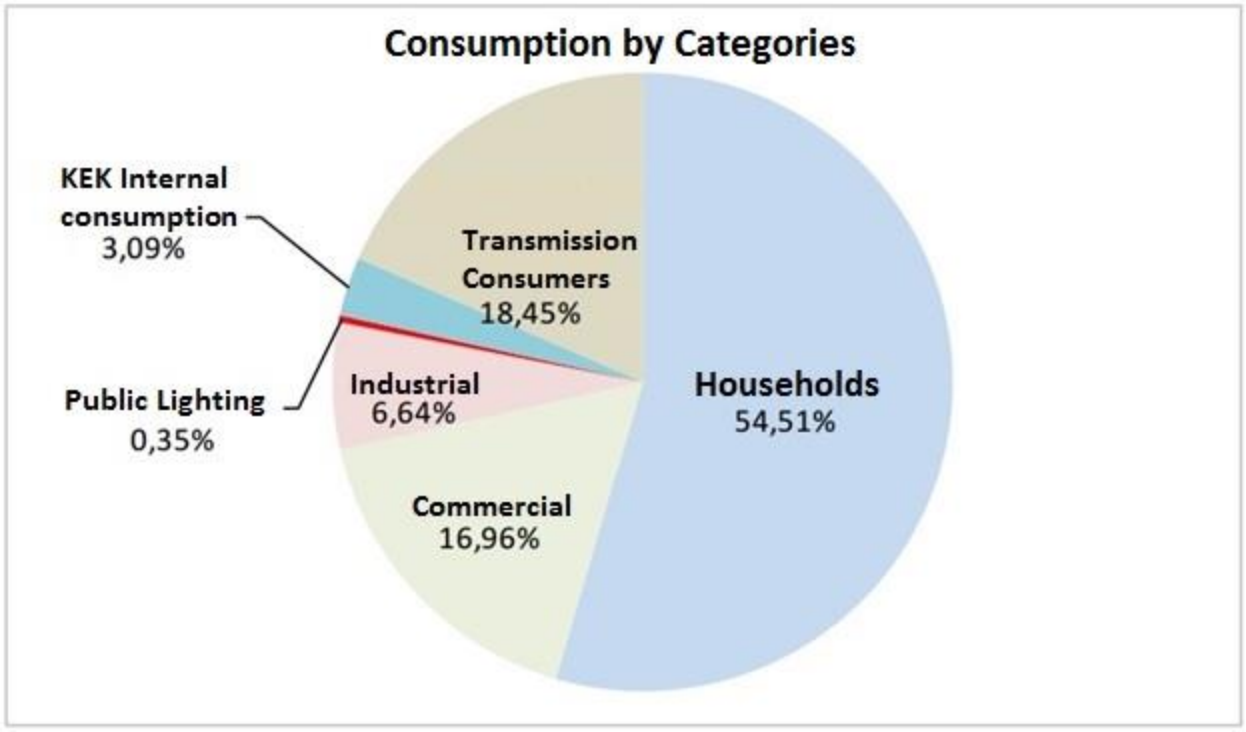


Figure 2 –Share of categories in overall electricity consumption 2011. Source: ERO, Annual Report 2011.

The high rate of electricity consumption by households and for household needs is not followed with regulation of the public policy for energy efficiency. An earlier INDEP study criticized the Law on Energy Efficiency in Kosovo, which regulates only the public sector and does not cover the private sector with regards to efficiency measures.[15] Also, the Law on Construction does not envision any specific criteria regarding energy efficiency. Therefore, legislation in Kosovo does not regulate the sector where more than half of the electricity is spent. To provide a clear answer to this section of the paper, electricity in Kosovo is spent more by households and less by the industry.

[15] Energy Efficiency in Kosovo , Institute for Development Policy (INDEP), http://www.indep.info/documents/47626_INDEP%20-%20Energy%20Efficiency%20in%20Kosovo.pdf

6. When is electricity spent?

As data from the ERO show in the Figure below, overall electricity consumption in Kosovo varies between 300GWh and 630GWh per month. This large difference in consumption, according to the same source, is because of seasonal differences, where the consumption during the winter is twice as high as during the summer season.

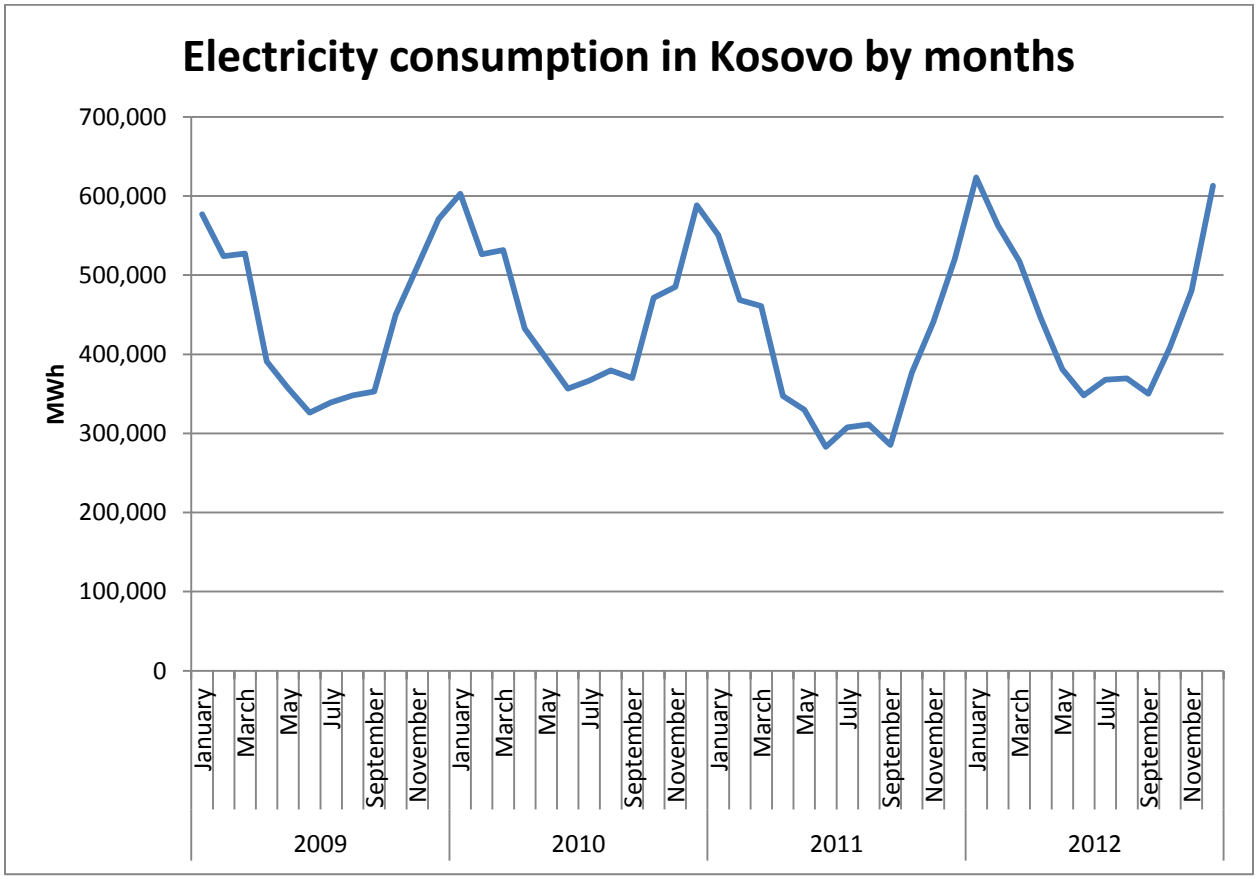


Figure 3 – Electricity consumption per months and seasons between 2009 and 2012. Source: Annual reports of the ERO 2009-2012.

Electricity load, calculated in MW, differs largely between winter and summer seasons. As Figure 4 shows, based on calculations from KOSID and Sierra Club as per ERO and KOST data, electricity load in Kosovo during the winter season varies between 600MW to 1200MW, while during summer, it fluctuates between 350MW and 750MW.

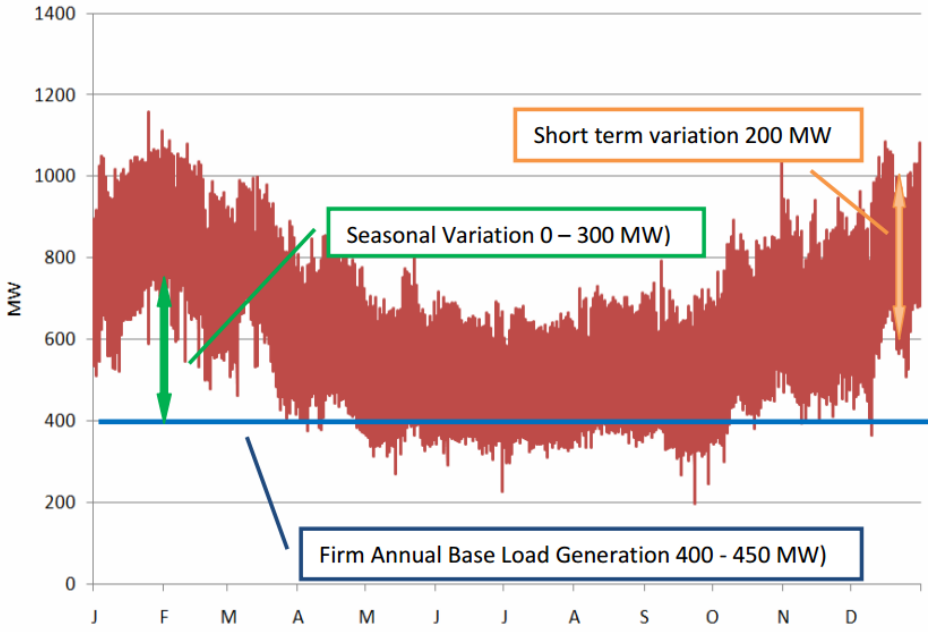


Figure 4 – Electrical energy load in Kosovo per hour and month.

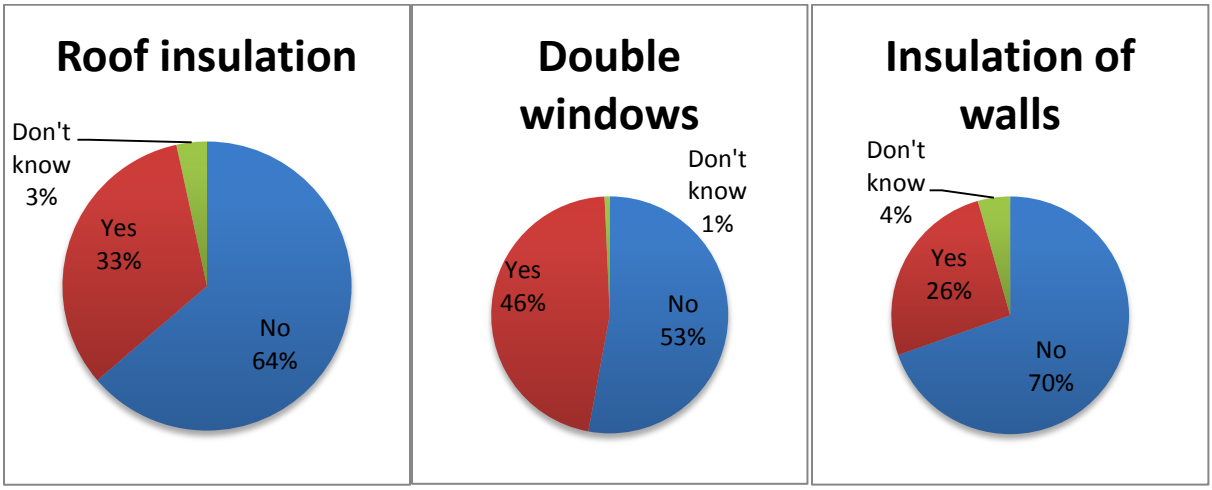
As these two comparisons of cost and load indicate, Kosovars spend way more electricity during the winter than during the summer season. This happens for two reasons. First, during the winter season, days are shorter and nights are longer which directly affects the increase of electricity consumption for lighting. However, electricity quantity used for lighting is way lower compared to overall consumption. Thus, the second reason, heating of residential areas with electrical energy is the main factor that affects in this variation. A preliminary calculation based on the data for consumption of electrical energy on monthly basis, we may claim that about 22% of the electrical energy injected into the distribution network is used for heating. This is a very high percentage when compared to the U.S., for example, where only 6% of the electrical energy is used for heating.[16] Managing this phenomenon would significantly affect electricity consumption, and through it, electricity bills.

[16] U.S. Energy Information Administration, Annual Energy Outlook 2012, http://www.eia.gov/energyexplained/index.cfm?page=electricity_use

7. Heating and thermic efficiency

Since most of the electrical energy in Kosovo is spent by households and a part of that energy is spent for heating, it is important to know the thermic efficiency of residential areas. According to a study of the American University in Kosovo and Rochester Institute of Technology, published in March 2013, the absolute majority of residential areas in Kosovo have no thermic insulation at all.[17]

According to the AUK-RIT survey, in the question whether households of respondents had roof insulation, 64% of them responded negatively, 33% responded positively, while 3% said they didn't know. Regarding the question on possession of windows with double glass in their households, 46% of respondents responded positively, 53% responded negatively, while 1% did not respond to the question.



Data from this study also shows that 48.1% of electrical bulbs used are of the incandescent (inefficient) type. Regarding insulation of walls, 70% of the walls in residential areas in Kosovo turned out to be un-insulated, 26% insulated, while 4% did not have an answer to this question. The data from this survey is almost entirely different with that from European countries. In Great Britain, for example, about 69% of households have wall insulation[18]. Insulation of residence areas in Kosovo, therefore, is at the lowest level compared to countries in Continental Europe.

[17] AUK-RIT Center for Energy & Natural Resources, Kosovo Household Energy Consumption: Facts and Figures, March 2013
http://www.rit.edu/~w-cenr/documents/2013,%20March,%20Kosovo%20Household%20Energy%20Consumption.pdf
[18] Estimates of Home Insulation Levels in Great Britain (December 2012), Department of Energy and Climate Change

8. Conclusions

In this brief analysis, we have shown that electricity bills in Kosovo have been virtually low. Citizens have paid the full price of electricity through KEK bills as well as through taxes, the environment and their health. This has affected, to some extent, the creation of the impression that electricity is cheap and that it represents one of the cheapest ways to heat residence areas. As a result, Kosovo citizens spent way more electricity during winter than during summer.

Due to the creation of the impression that electricity is cheap, there was no room for energy efficiency investments incentives. Subsequently, residential areas use electricity for heating during winter; they are inefficient, thus increasing even more the general electricity consumption. In other words, a considerable amount of energy spent for heating is lost due to the lack of insulation of walls, windows and roofs.

The trend of electricity prices, as we have shown, is on the rise. With the inadequate and hurried privatization of the energy sector as well as non-readiness of Kosovo for liberalization of energy market, these prices will go further up. Kosovo households will have large difficulties to face the price increase. The Kosovo Government must find a solution through public policies in the energy sector to enable citizens to cope with this.

Since households are the largest consumers of electricity in Kosovo, contrary to other countries where industries spend more electricity, the focus of government policies must be energy efficiency in the sector. So far, no public policy was focused on regulating the household sector.

Furthermore, there is no incentive measure in Kosovo for utilizing alternative ways for heating, which would reduce the energy demand to a considerable extent.

Since the prices will go further up, while Kosovo's economic development does not keep up with price increase, KOSID recommends the Government of Kosovo to assist citizens to decrease unnecessary energy costs in order so they can afford household bills.

To this end, KOSID will undertake other research in public policies, where the focus of study will be on the efficiency of the household sector. KOSID will recommend specific changes to policies, including incentive and punishment measures, in order so Kosovo citizens are able to afford their electricity bills.

Established in 2011 as an association of policy analysts, researchers and civil society activists, INDEP looks at development policies, providing a substantial vision for Euro-Atlantic integration. In Kosovo, where it is based, the institute has a special focus on strengthening democratic governance and plays the role of public policy watchdog.

GAP Institute for Advanced Studies is a Think Tank established in October 2007 in Kosovo. The primary goal of GAP is to attract professionals to create a professional development and research environment that is found in similar institutions in western countries. This also provides an opportunity for Kosovars to research, develop and implement projects in order to advance Kosovo society. GAP's priority is mobilization of professionals in addressing economic, political and social challenges of the country. GAP's main objectives include filling the gaps between the government and citizens, as well as filling the gaps between problems and solutions.

Forum for Civic Initiatives (FIQ) is a non-governmental organization focused on Philanthropy, Sustainable Development and Security Sector. FIQ also supports projects on active citizenship and environment protection through Grants programme. FIQ was established in 2000, by a small number of individuals, who saw the need for active citizenship in decision-making processes, as a result of the war in Kosovo during 1998-1999.
From being an organization focused on security and active citizenship issues, FIQ, in order to strengthen citizens' role, has expanded its scope to others programmes, including grant-giving, philanthropy and sustainable development.