Heavy Metal Emission

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research shows environmental impact that a huge dormant lead and zinc mining facility, named Trepca causes. The natural science investigations have thus focused on to determine the extent of the heavy metal pollution of the nearby river and found that the mining waste is still a very significant source of heavy metal pollution to the river, where the levels of in particular lead and cadmium were found to many times higher than WHO standards.

On the basis of this it is argued that the heavy metal contamination of the area presents a significant health risk to the local population, and the project is proposed in order to tease out some valuable lessons and guidelines relating to environmental management that may be utilized in the post-conflict UN governed transition economy of Kosovo, a territory with no effective environmental management in the past.

Reference:


Kosovo: Lead pollution requires immediate evacuation of Roma camps

This is an article written in June 2005, that talks about the evacuation of Roman, Ashkali, and Egyptian people that were living in a near region of Mitrovica. It explains how according to the World Health Organization and other UN organizations in Kosovo, more than 600 people were in serious health danger because of the mines in Mitrovica. The article also explains the fact that after the war in Kosovo, nobody really cared about the environment, and that there was lack of leadership to solve environmental issues, and especially this in Mitrovica. Further, the article explains how UNHCR has built these camps as a temporary solution, but the people who lived there stayed longer than 45 days.

According to some studies, the article talks also about the overall population in Mitrovica which has elevated levels of heavy metals, especially lead, but the samples from the three RAE IDP Camps had the most alarming lead levels in the blood. More than four years earlier the 2000 UNMIK report had also noted higher levels among RAE internally displaced persons (IDPs). According to WHO, a blood lead level of 10 micrograms per deciliter or below is acceptable. The measurements from the IDP camps were much higher than in the surrounding population and at levels which exceeded any region WHO had previously studied. Twelve children had exceptionally high blood lead levels, greater than 45 micrograms per deciliter. According to the article, WHO has made some experiments and has recommended the evacuation of pregnant women and children, because they were mostly affected by the high risk of getting sick in the area they were living. Although these organizations made an alert to the government and other organizations and public institutions, nobody helped the three populated camps with minority people in Mitrovica. And as one international humanitarian worker put it, "It is not a question of a solution, it is a question of the lack of will to do anything -- nobody seems to want to help the Roma."

Initially, in spring 2005 some organizations and local institutions decided to initiate a Risk Management Plan, and to evacuate the people from there. They started also to distribute hygiene packs and wood stoves. And it is confirmed that since than the sanitation in and around two of the camps has been greatly improved. WHO concluded in October 2004 that the primary source of lead contamination was the existing contaminated soil, which has measured in the camps as much as 359 times beyond safe limits. The illegal smelting activities are continuing but have been greatly reduced and many of the larger smelting sites have been eradicated. This is being closely monitored by the municipalities and international organizations. The article says that the situation is further complicated also because of the fact that the RAE people do not want to go back to live were they lived before (South Mitrovica), but the want that the local institutions to help them for a better life. Also one thing to mention is the fact that most of the people living in these camps have not yet recognized Kosovo's independence, and this plays a major role.

However, refugees international recommended some points to be considered: - by June 30, 2005 all pregnant women and children from birth to six years old be evacuated to rented flats in North Mitrovica or temporary shelters at the South Mitrovica site. Regular testing of all IDPs in the RAE camps continue and any person testing above 45 micrograms per deciliter be given immediate medical attention and relocated, - the SRSG instruct the International Municipal Representatives of the three municipalities involved to begin immediate negotiations with the municipal governments to provide a list of suitable land sites for the evacuation. From the lists provided, the SRSG choose the best possible site by June 30, 2005. - the World Bank and/or the European Agency for Reconstruction commit to a comprehensive environmental clean up of the North Mitrovica lead sites as recommended in the UNMIK November 2000 report


In this article, Mr. Duriqi explains the reasons behind the sue that the Ministry of Environment of Republic of Kosovo did against the giant "Ferronikelii". The author writes how "Ferronikelii" didn't fulfill the requirements they were asked for by law before, and how they kept releasing CO and other emissions without control. After some measures made by the inspectors of the Ministry of Environment, it was found that "Ferronikelii" surpassed the allowed levels of emission by 9 times.

Heavy Metal emission from Trepca research shows environmental impact that a huge dormant lead and zinc mining facility, named Trepca causes. The natural science investigations have thus focused on to determine the extent of the heavy metal pollution of the nearby river and found that the mining waste is still a very significant source of heavy metal pollution to the river, where the levels of in particular lead and cadmium were found to many times higher than WHO standards.

On the basis of this it is argued that the heavy metal contamination of the area presents a significant health risk to the local population, and the project is proposed in order to tease out some valuable lessons and guidelines relating to environmental management that may be utilized in the post-conflict UN governed transition economy of Kosovo, a territory with no effective environmental management in the past.
The authors offer some guidelines and valuable lessons on environmental management in Kosovo, particularly relevant to side effects caused by lead and zinc mining facilities in the Trepca region. The article argues that the heavy metal emissions from this area represent a high risk level for the local population. In addition to this, the authors continue into claiming that Kosovo should focus more on environmental issues, as part of sustainable economic growth. The article gives some indication as to what extent environmental issues impact individuals, but it also contributes toward realizing that such concerns need immediate reaction that would lessen the negative consequences from it.

This is a project that focuses on the environmental impact that a huge dormant lead and zinc mining facility - Trepca causes. The project have focused on the pollution that have metals cause to the nearby river.


The overview on Kosovo's air pollution condition provided by the authors indicates that area around the Power Plants, mainly Obiliq, is one of the largest sites of air pollution in the country. The article provides a background overview on electricity production, then it continues with the generation power from the two main power plants, and it also describes the various environmental impacts of mining operations. As such the article is helpful in identifying the concrete emissions released from the power plants which represent parameters that will define effective solution to improve air quality in Kosovo.

This article elaborates the case of one of the greatest polluters in Kosovo – the thermal Power Plant in Obiliq. Kosovo being very rich with coal started to use this resource to generate the energy and as such, Kosovo A and B thermal plants represent the major sources of energy in the country. Nevertheless, operating in poor conditions, both power plants emit major dangerous elements in the air, polluting at the same time air, water and soil. These and other problems, such as management of ash, coming as a consequence of a bad operation of thermo plants are touched by this article. Discussing the case of KEK, this article could be very well utilized in any research over air, water, and soil pollution in Kosovo and how these impact the lives of citizens.

This research article talks about the problems that thermal power plants located in Obiliq are causing to the air that we breathe. There are two thermal plants located only 5km away from the capital city, Pristina, and they burn coal to generate electricity. Taking into consideration that they are quite old and still use old technology to get the power plants going, they make a lot of external damage. The combustion process produces emissions that are spread to the air and those emissions include greenhouse gases such as CO₂, SO₂, NO, and particulate matter or (PM). Furthermore, the ash that is produced from these thermal power plants is transported by open-belt conveyors that enable the ash to spread easily while being transported, thus causing air pollution and extensive health risks for the population. The authors also support the article with their facts, graphs and stats that show us just how polluted our air is (PM concentration in the air is drastically higher than other European countries). They don't offer any solution for the problem, but their findings will surely help us in the near future to more carefully choosing transport distribution, and trying to filter sources of pollution.

The article is mainly considering the air pollution in Kosovo from the time Thermal Power Plan has started to work in Obiliq. The city of Obiliq is considered as the largest air pollution. The concern is mainly on combustion process that leads to generations of emissions to air, water and soil. In this article are given the details of power generation in Kosovo, Power Plant Kosovo A, Power Plant Kosovo B. Coal reserves and their quality are also explained. Therefore all those energy sources in Kosovo are tending to pollute the air, and in this article.


This article, written by Luljeta Krasniqi – Veseli for the website “Evropa e Lirë” argues about the environment issues that Kosovo is currently facing and it describes the reasons why do these issues happen. She tries to prove that the main risk of Kosovo’s air pollution is caused by the power plants, which according to her take a massive ground area, thus giving more negatives than positives to the environment.


This is a presentation based on a survey of Kosovo’s Department of Environment. This survey shows the energy sector of Kosovo as an enormous polluter, especially KEK which faces structural problems and efficiency along all stages of value adding. According to this survey, the integrated power system consists of two lignite mines Bardh and Mirash, two Thermal power plants (Kosova A, B). Bardh’s and Mirash’s mines produce 7 million tons/year of lignite. Two biggest basins are Kosovo’s lignite basin and Dukagin’s basin lignite. This article shows the biggest problems that KEK face today; old plants with exceeded lifetime, high technical and commercial losses and the third biggest problem is high operational cost. Burning these huge amounts of coal causes emissions to air. According to this presentation, the most important emissions to air from the combustion of lignite are SO₂, NOX, CO₂, particulate matter, heavy metal. This presentation is worthy to read.

The environmental status of Kosovo is dominated by several negative issues that created a bad environmental situation. In general, this Kosovo has serious air pollution problems especially by factories and the energy sector. The main problem is lack of regulations or government policies because those factories are enormous polluters which can cause serious problems for people that live in Kosovo. The major factor of the air pollution is the energy sector of KEK (Kosovo Energy Corporation) Moreover; KEK is the only energy sector that provides electricity for citizens in Kosovo. The fuel of KEK is mainly lignite, which is also one of the most important natural resources in this country. According to Nezakete Hakaj “The integrated power system consists of two lignites, one in Bardh and Mirash, two Thermal Power Plants (TPP) Kosovo A (Sunita) and B (2 units) with an overall effective capacity of 645 to 710 MW out of 1513 MW of installed capacity, the transmission and distribution networks, a dispatching centre and supply. Currently these two lignite mines supply the two TPPs, with about 7 million tons/year of lignite.” Regarding this information we can assume that 7 million tons per year of lignite is a significant number, and the government must find a solution as soon as possible.

Ndotja kercenon banorret e Obiliqit

Based on this article, in 2010, 14 people from Obiliq are diagnosed with cancer and the number of people who visit the hospital is increasing from last year, this date are form the Obiliq Hospital. The KEK spokesman said that, 18 000 ton of dangerous material will be remove from the Obiliq, and in that place they will build a garden with many trees. The direction of Environmental Protection sector said that the gas emission from KEK exceed the norms of European Union.

Reference:

KEK, € 25 million need to stop the air pollution
Based on the KEK’s functionary, the cost to repair three electro filters is € 25 million. This year, KEK will substitute two electro filters and next year they will substitute the last one. This repairing is paying only by KEK’s budget. After repairing those electro filters, the gas emission will be decreases in the air, it will be less than 50 mg/Nm².

Reference:

Integrating Environment into Agriculture and Forestry
Progress and Prospects in Eastern Europe and Central Asia

"Forestry. The Kosovo Forest Agency, established in 2003, is responsible for managing forests, i.e., public forests, and supervising private forest land. A Forestry Law, approved in 2003, is based on core principles of sustainable development, as defined in the Rio Convention of 1992. Best practices from the EU include establishing advisory services and promoting cooperation among private forest owners, who account for 38.4 percent of all forest area. Overall, the sector is characterized by poorly organized management and control functions, and weak inter-agency coordination."

An article for Forestry Law


Summary for Environmental Threats and Opportunities Assessment

"The United States Agency for International Development (USAID) routinely conducts an Environmental Threats and Opportunities Assessment (ETOA) at its Missions at roughly five year intervals, corresponding to periodic planning intervals. The US Foreign Assistance Act (FAA) stipulates a review of the status of biodiversity conservation prior to the development of a new country assistance strategy and to help target and improve US government assistance to populations and economies dependent on these resources for their livelihoods. This report presents an update of a biodiversity assessment completed in 2003, plus it provides a State of the Environment report that emphasizes the water and energy sectors, two areas where USAID/Kosovo is currently engaged in several activities."


Ndotje enorme e ambientit në Kosovë

"Nga oxhaqet e termocentralit "Kosova B", në bazë të analizave që janë bërë më herët nga Instituti "Inkos", dalin rreth 280 miligramë kub hi, që do të thotë disa herë më shumë se normat e parapara të BE-së. Ndërkët dhe të oxhaqeve të termocentralit "Kosova A" dalin rreth 1500 miligramë për metër kub. Sylë Tahirsylaj, drejtor i Institutit Hidrometeorologjik të Kosovës, thotë se për kontrollin e cilësisë së aqit në vend aktualisht i kanë të vendosura 4 stacione, përderisa me ndihmën e Bashkimit Evropian do t’i blejnë edhe 5 të tjerë."


Investments to reduce KEK emission since 1999

Kosovo since 1999, have spent over 700 million euros for the import of energy and over 1 billion in renovations in plants A and B and we still are facing large reductions in electricity in most of our country.


Air Pollution from lignite-based electricity generation in Kosovo

This is a presentation based on a survey of Kosovo’s Department of Environment. This survey shows the energy sector of Kosovo as an enormous polluter, especially KEK which faces structural problems and efficiency along all stages of value adding. According to this survey, the integrated power system consists of two lignite mines Bardh and Mirash, two Thermal power plans (Kosova A, B). Bardh's and Mirash's mines produce 7 million tons/year of lignite. Two biggest basins are Kosovo's lignite basin and Bukagjin's basin lignite. This article shows the biggest problems that KEK face today; old plants with exceeded lifetime, high technical and commercial losses and the third biggest problem is high operational cost. Burning these huge amounts of coal causes emmisions to air. According to this presentation, the most important emissions to air from the combustion of lignite are SO2, NOx, CO2, particulate matter, heavy metal. This presentation is worthy to read.

Pollution threatens the citizens of Obiliq

This article, published by the radio "Free Europe", written by Ariana Kasapolli tells how many people have been having health difficulties due to KEK air pollution, in the Obiliq municipality. According to this article there have been 14 patients diagnosed with cancer within year 2010. In this article, there is the head of the district hospital Ms. Shulemaja, who argues the number of the patients received and diagnosed with cancer, has been increasing over the years.

The head of the municipality of Obiliq, Mr Krasniqi, says that there has been a request sent to the relevant institutions (KEK) to take measures in order to prevent air pollution. Also, we have the response of the spokesperson of KEK saying that, there have been projects implemented in this municipality to improve the environment within the region.


Environment and climate change

This article (rapport) written by UNDP, explains how the environmental issues in Kosovo are linked to the issues in human health, although we lack the awareness about its consequences in public places. On the other hand, it is a very important creation to be aware about, since it fulfills the European integration agenda, hence we have to be prepared and achieve the levels of international environmental conventions. Another important issue regarding environment is the Climate Changes which is greatly shifting (scientifically proven fact that was recognized by the Nobel Peace Prize in 2008). Examples and different instructions from other countries are a great benefit for Kosovo to take a lesson, since we know that every human is responsible of this change (and they are being all over the globe), Kosovo is not an exception.


KEK makes it harder to breath

This article published in Gazeta JnK online magazine shows details and facts about the health conditions of workers at KEK. According to the director of Institute for Medicine of Labour in Obilic, Xhevat Pilana, about 30 percent of workers at KEK suffer from respiratory diseases.

Moreover, while referring to some data gathered from the National Institute of Public Health of Kosovo, a representative from the office of World Health Organization in Pristina says that the incidence of lung cancer in the region of Pristina and Obilic is pretty higher. There is an indication that one of the reasons for this incidence may be the environmental pollution, which is caused by the use of coal for electricity production.

Moreover, Smail Mustafa is just one of the many KEK employees that manifested health issues linked to the power plant. According to Mustafa his sickness has emerged not only because of the difficult working conditions in the power plant, but also as a result of the huge lack of basic supplies for protection that are needed in the workplace.


Living under the shadow of death

This article presents some data on health issues affecting citizens of Obilic municipality. Data gathered by the Directorate for Health and Social Welfare in this municipality show that the whole region faces a high rate of respiratory diseases. The number of citizens who sought medical help at the Main Family Medicine Center in Obilic, just for the first six months of 2011, has exceeded the total number of inhabitants of the municipality.

In addition, the article shows that powerplant Kosovo A was labeled as "the worst individual source of pollution in South East Europe." This note was discovered in a letter shared in May between Stefan Füle, the EU commissioner for enlargement, and Gunther Oettinger, World Bank’s commissioner for Energy.


Air Pollution with Particulate Matter and Heavy Metals of Kosovo Thermal Power Plant

This is an article which briefly explains vital environmental problems that exist in Kosovo. The article written by A.M. Syla, A. H. Veliu, K Berisha clearly states the problems of air pollution in the surroundings of Power Plants that appeared as early as 1954 when Thermal Power Plant of Kosovo has started operating in Obilic. Furthermore, it tells us how, the city of Obiliq, approximately 5 km north of Pristina-capital of Kosovo, is the site that largely contributes to air pollution. Also, the authors state the fact that coal-related industries have been a major element of the economy of Kosovo, but created extensive health risks due to environmental pollution with PM and a variety of other substances.

Specifically, the generation of energy from thermal power plants is correlated with negative effects to the environment since the combustion installations use large amounts of fossil fuels or other natural resources to convert them in useful energy supply. Nevertheless, the combustion process leads to the emission of harmful particles to the air in forms of SO2, NOx, Particulate Matter, heavy metals, and CO2 which are considered as one of the most important environmental concerns nowadays.


Air pollution from lignite-based electricity generation in Kosovo

In this presentation Ms. Hakaj presents some statistics regarding the environmental pollution from KEK. The presentation shows data about the type of the chemicals released by KEK and the amount of chemicals emitted.
Reference:

KEK-u 25 milionë euro për mos ndotjen e ajrit

According to Telegrafi.com, in 2011 the administration of KEK has approved a 25 Million Euros investment in reducing the level of air pollution from KEK.

Reference:

KEK-u është edhe kancerogjen

Ky artikull flet sesi semundjet e frymmarrjes prekin rreth 30 per qind te punetoreve te KEK-ut, Mirepo KEK-u nuk i merr me shqetesim te dhenat e Institutit te Mjekesise se Punes per shkallen e larte te semundjeve. Gjithashtu, ne artikull mund te gjeni te dhena dhe deklarata ne drejtoresha per Qendren e Mjekesise familjare ne Obiliq e cila shprehet mjafte e shqetesuar per shendetin e banoreve sidomos te asaj ane.

Reference: