



IEEJ: June 2012

Kosovo Country Presentation

Azra Krasniqi
26 June, 2012



Former Yugoslavia





General information of the country

After the war in 1999, the United Nations Security Council adopted resolution 1244, by which the United Nations Interim Administration Mission in Kosovo (UNMIK) administered Kosovo until its political status was settled. This administration began reducing in both competence and power by the declaration of independence on 17 February 2008..

As well as being the youngest country in Europe, Kosovo is also the poorest. The current Gross Domestic Product (GDP) per capita is €1,760 per annum, with 48 percent of population unemployed and only 26 percent is employed. The latest poverty measure was made in 2007, according to which the poverty line is €43 per month; 45 percent of population is below this line, and 17 percent live in extreme poverty, on below €30 a month.



Energy sector of the country:

Lignite is the most important energy resource in Kosovo, supplying some 97% of the total production of the electrical energy, which is the primary energy source.

The sector is regulated by the below legislation:

- Law on Energy
- Law on Electrical Energy
- Law on Energy Regulatory
- Law on Energy Efficiency
- Law on District Heating
- Law on Natural Gas



Electricity is mainly generated by two coal (lignite) combustion plants: Kosova A and Kosova B, with an installed capacity of 1478 MW;

Besides the existing TPPs, there are also several hydro potentials installed, totally producing 11.8 MW.

There is only one wind potential installed in Kosovo with the capacity of 1.35 MW.

The electricity is supplied to 447, 492 consumers, out of which 233 industrial; 696 public ltg; 68,591 commercial and 377, 966 household.



The Energy Strategy of Kosovo 2009-2018, which identifies the most important challenges that the energy sector faces, such as bellow

- Provision of sustainable energy supply;
- Development of new lignite-fired energy generation capacities;
- Development of energy transmission infrastructure;
- Development of energy distribution infrastructure;
- Promotion of foreign investments in the energy sector;
- Optimized utilization of all energy sources available, including local and imported sources;
- Ensuring an efficient use of energy and promotion of renewable energy sources;
- Development of gas network infrastructure.



The Kosovo Energy Efficiency Plan 2010-2018 (KEEP), adopted last year, contains 9% or 91.89 ktoe target that shall be achieved during 2010-2018. The First Preliminary Report is in preparation phase. Targets for this period are set to 3% or 31.95 ktoe. Energy Efficiency Improvement (EEI) measures will be undertaken in these sectors: Household, Services, Industrial, Transportation, and Agriculture.

According to the first preliminary report the target is achieved 2.2% or 20.05 ktoe. Savings in Household sector are 49.56% or 9.9365 ktoe and Services sector 50,44% or 10.107 ktoe, in Industry and Transportation there is no evaluation made due to the lack of Methodology Monitoring & Verification & Evaluation (M&V&E).



Kosovo Plan on Renewable Energy Sources 2011-2020 (KPRES) contains targets for renewable energy sources in final consumption of energy up to 2020. Based on the study for calculation of RES targets up to 2020, for Kosovo it resulted to be around 26% RES of Gross energy final consumption in 2020.

The Kosovo RES targets by 2020 year have to be defined by end of 2012 year. These targets will be fulfilled by diverse renewable energy sources, mainly from biomass, hydro and wind energy. Part of these targets is also the target for biofuels which will be 10 % of fuels in the transport sector.



Energy consumption in Kosovo in ktoe in years 2009-2011

| Economic sector | 2009 | 2010 | 2011 |
|---------------------|----------------|----------------|----------------|
| Industrial sector | 237.12 | 254.89 | 365.71 |
| Household sector | 456.22 | 461.67 | 490.51 |
| Services sector | 111.86 | 113.39 | 119.57 |
| Agricultural sector | 18.47 | 18.44 | 19.95 |
| Transport sector | 341.36 | 318.91 | 338.58 |
| Total | 1165.03 | 1167.31 | 1334.32 |



Energy sources consumption in ktoe

| Source | 2009 | 2010 | 2011 |
|-------------------|----------------|----------------|----------------|
| Coal (lignite) | 57.30 | 82.59 | 86.65 |
| Oil products | 526.26 | 489.50 | 605.14 |
| Biomass | 234.74 | 236.35 | 241.93 |
| Biofuels | 0.10 | 0.07 | 0.13 |
| Electrical energy | 337.19 | 352.81 | 396.80 |
| Solar energy | 0.56 | 0.61 | 0.63 |
| Heating energy | 8.86 | 5.38 | 3.04 |
| Total | 1165.03 | 1167.31 | 1334.32 |



Overview of use of all energy sources in the household sector (ktoe)

| Source | 2009 | 2010 | 2011 |
|--------------------|---------------|---------------|---------------|
| Coal | 22.16 | 22.20 | 23.32 |
| Petroleum products | 27.33 | 25.41 | 25.82 |
| Biomass | 216.53 | 217.57 | 222.36 |
| Electricity | 184.28 | 192.81 | 216.85 |
| Solar energy | 0.17 | 0.18 | 0.19 |
| Heating energy | 5.76 | 3.50 | 1.98 |
| Total | 456.22 | 461.67 | 490.51 |



Available and consumption energy in 2011 (ktoe)

| | Coal | Petroleum products | Biomass | Electricity | Bio-fuel | Solar energy | Heating energy |
|-------------------------|-------|--------------------|---------|-------------|----------|--------------|----------------|
| Available energy | 86.31 | 577.18 | 241.93 | 396.80 | 0.13 | 0.63 | 3.04 |
| Consumption | 86.99 | 605.14 | 241.93 | 396.80 | 0.13 | 0.63 | 3.04 |
| Difference | -0.68 | -27.96 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |



Electricity consumption by economic sectors in 2011 (ktoe)

| Sector | 2011 |
|--------------|---------------|
| Industry | 111.36 |
| Transport | 0.00 |
| Household | 216.85 |
| Agriculture | 6.87 |
| Services | 61.72 |
| Total | 396.80 |



Outlook of production, import, consumption and losses in 2012

| MW production | Total |
|--|-----------|
| National Generation | 4.949.828 |
| Import | 877.330 |
| Available energy (National production+ import) | 5.827.158 |
| Neto demand | 5.693.346 |
| Transmission losses | 128.197 |
| Lack | -62.509 |
| Surplus (Export) | 68.125 |
| Overall demand | 5.821.544 |



Outlook on energy demand by source in years

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Coal | 143.25 | 148.32 | 153.58 | 159.05 | 164.71 | 170.59 | 176.69 | 183.01 |
| Oil products | 598.99 | 622.71 | 647.38 | 671.02 | 695.60 | 721.15 | 747.72 | 775.34 |
| Biomass | 347.34 | 346.75 | 341.77 | 332.09 | 326.33 | 320.19 | 304.30 | 278.03 |
| Biofuel | 0.29 | 0.30 | 0.32 | 0.33 | 0.34 | 0.36 | 0.37 | 0.38 |
| Electrical | 436.71 | 451.76 | 465.69 | 485.13 | 487.10 | 489.94 | 504.56 | 518.24 |
| Solar | 0.39 | 0.42 | 0.44 | 0.47 | 0.50 | 0.53 | 0.56 | 0.59 |
| Heating | 11.23 | 11.41 | 11.70 | 11.80 | 11.79 | 11.99 | 12.19 | 12.40 |
| Total | 1538.20 | 1581.68 | 1620.88 | 1659.87 | 1686.37 | 1714.76 | 1746.40 | 1768.00 |



1. Human capacity
2. Low levels of billing and collection don't send the right price signals, set the basis for a healthy energy economy, and fuel an unsustainable demand in power.
3. Since Kosovo depends on foreign investors, energy projects such as Kosova e Re Power Plant, favour attracting those investors rather than the national interest.
4. Kosovo is limited to lignite and has an unfavourable geopolitical situation (
5. Weak regulatory regime and governance of the power utility.

Subjects of interest during the training

1. Policies on Renewables,
2. Switching more to LPG use rather electricity for heating
3. Energy conservation
4. Energy efficiency
5. Clean technologies



Contact : report@tky.ieej.or.jp