

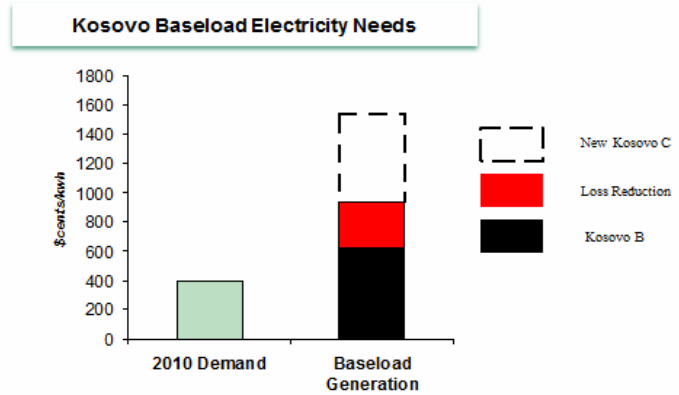


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Kosovo Needs Clean Energy, Not New Coal

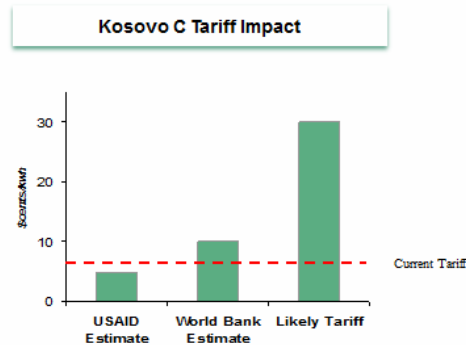
Project Background: The World Bank, along with USAID propose to close 450 MW of old inefficient coal power (Kosovo A), rehabilitate one 600 MW coal plant (Kosovo B), and construct a new 600 MW lignite plant (Kosovo C).

No Coal Plant is Needed: Analysis commissioned by the Sierra Club conducted by a former chief EPA air enforcement officer found the proposed construction of new Kosovo C would lead to base load capacity that is three times higher than existing demand in 2010 and four times higher when corrected for avoidable losses. Building Kosovo C would require Kosovo consumers (or the government) to service over a billion euro in debt at a time when they are also servicing debt for necessary improvements in the Sibovc mine, Kosovo's wasteful transmission and distribution systems, and refurbishment of Kosovo B¹.



New Coal Power from Kosovo C is not Needed

A New Coal Plant Will Drastically Increase Electricity Rates: The initial cost estimates for electricity provided by Kosovo C were grossly underestimated,² subsequent documents have tripled expected rates. However, even these rates are likely to be unrealistically low as Kosovo suffers from a peak load not baseload power deficit. Building a baseload power plant will require investors to recoup costs over a small number of peak operating hours. It is feasible that tariffs up to four times higher than current rates would be needed to service the total new investments.³ It's important to note that coal plants are not designed to provide peak power as they can not be 'turned on and off' quickly. Hydro and wind, especially when combined with natural gas resources are far more suited for this purpose.



New Coal Will Dramatically Raise Electricity Rates

¹ Buckheit, B. 2011. Reevaluating Kosovo's Least Cost Electricity Option. Available at <http://bit.ly/z1IMcN>

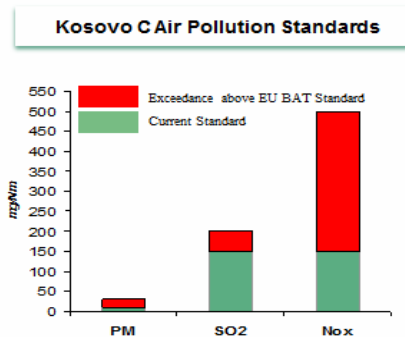
² Buckheit, B. 2011. Affordable Electricity for Kosovo? Option. <http://bit.ly/rK9Oxj>

³ The analysis also knowingly adopts the incorrect assumption that tariffs have already been increased to fund the project.

Efficiency & Low Carbon Energy are the Low-Cost, High Job Growth Option: The business as usual (BAU) path, dominated by an expanded use of low-quality coal, is not the least-cost energy option for Kosovo. Sierra Club Analysis found that reducing technical and non-technical losses to 5 percent (each) would reduce the needed base load capacity by 20 percent which is far less than the capacity need suggested by the World Bank. Energy efficiency efforts would reduce this need even further and allow a refurbished Kosovo B to meet base load generation needs through 2025 – even at a robust 4.5 per cent GDP growth rate⁴. Moreover, analysis from Professor Dan Kammen former ‘Clean Energy Czar’ at the World Bank found that a low-carbon path exists for Kosovo that integrates aggressive energy efficiency deployment, use of both large and small-scale hydropower, solar, biomass and extensive use of wind energy while reducing human and ecological damage. This path also provides 30% more jobs than a business as usual coal dominated path and does so at an estimated cost savings of 50%⁵.

New Coal Will Harm Human Health and EU Accession: Due to the topography where the Kosovo C plant would be built, it is likely that emissions will exceed EU and World Bank ambient air quality standards.

However, recently released USAID documents show that adequate air quality monitoring is not being undertaken⁶. If accurate monitoring and modeling were being conducted it would likely demonstrate that emissions from the both plants will cause unhealthy levels of air pollution, even if Kosovo B and Kosovo C meet EU emission standards. Entrance to the EU while



New Coal Will Exceed EU Air Quality Standards

pursuing a plan inconsistent with the 20-20-20 energy and climate mandate puts a poor nation at a severe economic disadvantage within the Union. We believe that, as a consequence, it may be necessary to add Best Available Controls (BAT) to both the existing and proposed new Kosovo units. This will add hundreds of millions of euro to the estimated cost of Kosovo C, for which no need has been demonstrated. It may also be the case that a proper monitoring and modeling program will show that, even with BAT controls, emissions from the Kosovo plant will cause exceedances of health-based ambient air quality standards.

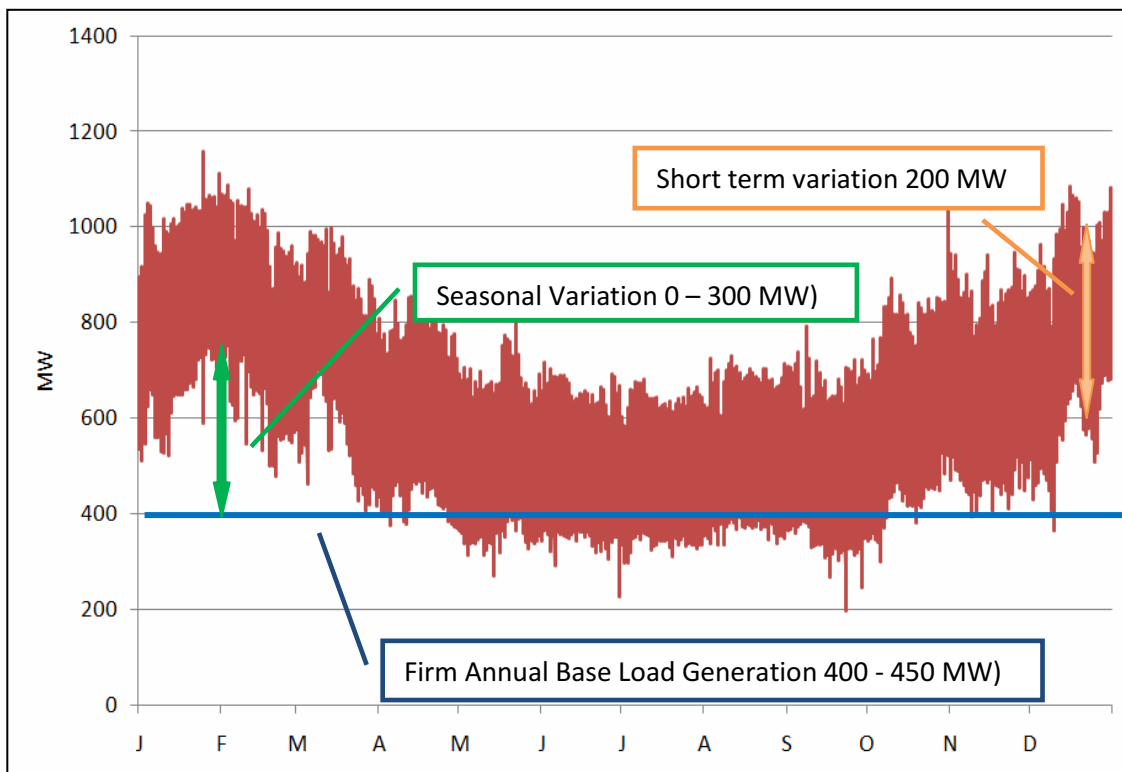
Kosovo’s Clean Energy Solution: Kosovo has ample opportunities to provide clean power that does not put communities or environments at risk:

Reduce losses and invest in energy efficiency: Reducing technical and non-technical losses to 5 percent or less should be a top priority and should be completed within the next 5 years. In addition, implementation of energy efficiency programs should have higher priority than construction of new generation capacity.

⁴ Buckheit, B. 2011. Reevaluating Kosovo’s Least Cost Electricity Option. <http://bit.ly/z1IMcN>

⁵ Kammen DM, Mozafari M, Prull D. 2012 available at <http://rael.berkeley.edu/energyforkosovo>

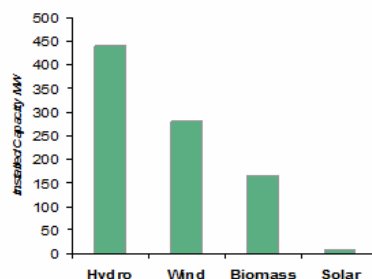
⁶ Technical Assistance for Ambient Air Quality Institutional Capacity Building related to the Environmental Assessment for the New Kosovo Power Plant (Contract Number EPP-I-00-03-00004-00 Task Order No 11)



Renovate existing Kosovo B units: Renovation of Kosovo B plant is a top priority that should be completed before Kosovo A units are closed. Successful renovation obviates the need for new coal investments and significantly reduces Kosovo's debt load.

Invest in alternative peaking generation: It is neither technically nor economically feasible to cycle base load coal units to meet peaking needs. Investments in appropriate peaking assets are therefore required. Such assets include hydro and wind, (currently 200 MW of profitable wind energy projects for Kosovo are on hold due to plans for a new coal plant and the delays that this has introduced into the process for the nations' Feed-in Tariff scheme) which are complementary sources – the peaking capacity of hydro is extended where wind is also available. Kammen's report⁵ found that investing in wind, biomass, and exploring for geothermal as well as regional cooperation around hydropower can not only meet Kosovo's energy needs, but do so in a way that integrates the private sector in a lead position in the nation's energy economy, while creating significantly more jobs than would a continued reliance on coal.

Alternative Energy Sources



Kosovo Has Significant Clean Energy Potential

For More Information contact: Justin.Guay@SierraClub.org, Nezir.Sinani@Indep.info