## Visit to Hydro Power Plant MATKA and the Exhibition Center of Matka

Hydro power plant Matka or Sv. Petka is located on the river Treska, near Skopje. Matka Canyon is protected as a natural monument. At the exit of the Matka canyon, an artificial lake was built on the river Treska, with a concrete dam, for the production of electricity in the thirties of the last century. Actually, it is the oldest artificial lake in our country.

In the Exhibition Center of Matka, we were presented some facts about electricity through the history, the beginnings of the hydropower plant work, difference between electricity and electrical energy, as well as an explanation of the most contemporary ways for electricity production from the renewable sources, such as: solar energy, hydropower, wind energy, etc. We were explained the process of producing electricity from the kinetic or mechanical water energy that enables the rotation of the turbines, electricity production and its transmission through the electricity network to our homes. The operation of the hydropower plant is managed and controlled by the responsible people from the control room.

The old turbine for electricity production is placed as a museum exhibit. We have seen how turnings of a bicycle's wheels produce electricity, so the wheels turned faster, the bulbs were brighter. Then, we have seen a lamp which represents a small moving sun that lit small solar panels – a simulation of the electricity production process. Actually, it was an example of how electricity can be obtained from solar energy, as a renewable energy source. We also learned how to generate a small amount of electricity that can pass safely through the body. That was performed by a glass ball or so-called plasma ball whose light rays come out and touch our hands.

Our visit of the Hydro power plant Matka and the Exhibition Center was very interesting and educational because we have a chance to see electricity production by the help of water power and other renewable energy sources. We have learned a lot of information about electricity and electrical energy too.

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