

Renewable energy sources are those sources of energy that are preserved in nature and renewed fully or partly. These are, in particular, energy from water, the sun and wind, biomass, biogas, and geothermal energy.

Over the past few years, the market for energy produced from renewable sources – green energy market – has been gradually gaining ground in the European Union. The goal of the market is to promote production of energy from renewable sources so as to make it more competitive with energy produced from conventional sources. This encourages construction of new plants that use renewable energy and contributes to sustainable development.

About a half of electricity produced by Hrvatska Elektroprivreda (HEP) comes from hydro power plants. It is understandable therefore that HEP wants to place special value on this energy and to join the green energy market.

The selling of green energy is based on certificates which attest to its production and origin.

In 2003, HEP Generation had all of its hydro power plants certified for production of electricity from renewable sources. The certification was performed by TÜV Bayern Sava d.o.o. Zagreb, a subsidiary of the German certification agency TÜV Süddeutschland, München. The standard used for certification purposes was CMS Standard 83 – kriterienkatalog Euzeugung – EE-08/02.

During the certification process, 25 hydro power plants were examined and successfully certified. The employees of the hydro power plants had to prepare comprehensive documentation in proving the quality of operation of the plants. All permits relating to operation such as building and operating permits, water-use permit and concession were examined. Processes and procedures prescribing production planning and production, maintenance planning and maintenance, overhaul and reconstruction planning and carrying out of these plans were also examined. Adherence to plans and procedures was proved through reports and performance records. In addition, many other documents were examined which helped to prove the quality of operation and organization of the hydro power plants.

Special attention was paid to the procedures and proofs relating to environmental harmlessness of the power plants and to waste management.

The most important thing in the certification process, besides care for the environment, is proving the amount of electricity produced and its records. For this purpose, all meters in hydro power plants were examined and tested as well as the method used to record electricity production. This proved that production records corresponded to the actual production.

Certificates are valid for one year. Reexamination must be carried out every year to renew them.

The above described procedure is carried out in order to provide proofs to buyers of green energy that what they are buying is really produced from renewable energy sources and in an environmentally harmless manner.