

In **Bosnia and Herzegovina**, brown coal and lignite make a very large contribution to primary energy supply (62.0% in 2017). Only North Korea, South Africa, Mongolia and China have higher coal dependencies. In 2018, Bosnia and Herzegovina produced 14.3 million tonnes of brown coal and lignite. This was mostly used to generate electricity at power plants near to coal mines: 73.0% of the country’s gross electricity production was from coal in 2017. In addition, 1.5 million tonnes of imported coking coal was consumed in 2018.

At 2 264 million tonnes, Bosnia and Herzegovina’s reserves of lignite are substantial. Total lignite resources are reported to be 5 274 million tonnes. The largest coal deposits are located in the north-east of the country around Tuzla in the Kreka-Banovići coal basin. Bosnian lignite typically has a lower calorific value of 9 100 kJ/kg (2 200 kcal/kg), a moisture content of 49%, an ash content of 3.8% and a high sulphur content (as-received values).

ELEKTROPRIVREDA BOSNE i HERCEGOVINE (EPBiH) is a state-owned utility company with seven subsidiary coal mining companies: Rudnici „Kreka“ (Šikulje and Dubrave opencast lignite mines and Mramor underground mine); RMU „Kakanj“ (Vrtlište opencast mine, Haljinići underground mine and Begići-Bištrani underground mine which opened in July 2013); RMU „Zenica“ (Stara Jama, Raspotočje and Stranjani underground mines); RMU „Breza“ (underground mines at Sretno and Kamenice); RMU „Đurđevik“ (Višća opencast brown coal mine and Đurđevik underground mine); and RMU „Abid Lolić“ and RU „Gračanica“ which operate opencast mines.

RMU BANOVIĆI operates two large opencast mines at Grivice and Turija, employing hydraulic shovels, draglines and 170‑tonne trucks to mine a 12-metre seam. The Čubrić opencast mine was closed in 2011. Opencast mines at Banovići have an average overburden ratio of 5 cubic metres per tonne. The company also operates the partly mechanised Omazići underground coal mine. In November 2015, RMU BANOVIĆI signed an agreement with DONGFANG ELECTRIC CORPORATION of China to build a new power plant in Banovići. Financed by the INDUSTRIAL AND COMMERCIAL BANK OF CHINA, the €400 million project includes a 350 MW lignite-fired unit with a supercritical circulating fluidised bed boiler. In September 2019, IGH of Croatia, STEAG ENERGY SERVICE and SGS were selected to supervise the power plant construction project.

Coal mines situated in northeast and central Bosnia serve the Tuzla and Kakanj power plants owned and operated by EPBiH. The Gacko coal mine and power plant in the south of the country as well as the Bogutovo Selo opencast mine and Ugljevik power plant in the east are operated by the state-owned ELEKTROPRIVREDA REPUBLIKE SRPSKE (EPRS). Other mines include Kamengrad mine and the Livno and Tušnica mines which supply Ugljevik power plant, although not all are in production.

The 715 MW Tuzla power plant has three operational units and supplies heat to Tuzla and Lukavac as well as process steam to nearby industries and fly ash to the cement works at Lukavac. After the Bosnian war of 1992-95, major overhauls were completed at the plant, including boiler upgrades and the installation of new electrostatic precipitators. The 450 MW Kakanj power plant has three units and was similarly reconstructed and modernised after the war. In addition to the generation of electricity, the power plant supplies heat to the city of Kakanj as well as ash and slag to the Kakanj cement works. New units are planned at both plants: the 450 MW Tuzla 7 and the 300 MW Kakanj 8.

In November 2017, EPBiH signed a loan agreement with the EXPORT-IMPORT BANK OF CHINA to finance the €722 million Tuzla 7 project. The new unit will replace the four oldest units at Tuzla (2 × 32 MW, 100 MW and 200 MW). When completed, Tuzla 7 will provide almost one quarter of EPBiH electricity production.

At the end of 2018, EPBiH adopted its 2019-2021 business plan in which construction of Tuzla 7 was given priority, followed later by Kakanj 8. These permitted power plants are needed to replace old units that must be phased-out due to limits imposed under EU regulations and also to provide a market for local coal.

The Gacko and Ugljevik power plants, each of 300 MW, were commissioned in 1983 and 1985 respectively. In 2019, MITSUBISHI HITACHI POWER SYSTEMS and RUDIS of Slovenia completed a FGD retrofit project at Ugljevik power plant. Under a national emission reduction plan (NERP) agreed with the Energy Community, FGD at the Gacko plant will be needed from 2023. In the future, lignite for these plants could come from new opencast mines being developed by COMSAR ENERGY at Delići, Peljave-Tobut and Baljak and by EPRS subsidiary RUDNIK i TERMOELEKTRANA (RiTE) UGLJEVIK at Ugljevik-Istok.

A new 300 MW lignite-fired power plant came online in September 2016 at Stanari in northern Bosnia and Herzegovina. The plant was built by DONGFANG ELECTRIC CORPORATION and financed by the CHINA DEVELOPMENT BANK with a €350 million loan. To supply the power plant, Stanari coal mine at Doboj, with reserves of 108 million tonnes, has increased its annual output capacity from 0.6 million tonnes to 2 million tonnes with a loan from SBERBANK of Russia. The UK-registered EFT GROUP owns the Stanari mine and power plant.