

The Serbian capacities of 3.935 MW are organized in three state-controlled regional entities - Nikola Tesla, Kostolac and Panonske Thermal Power Plants. Oil production has doubled in the previous ten years, whereas the production of gas has been considerably replaced with importing. Serbia's dependence on gas, imported from Russia, through Ukraine and Hungary, reaches 80 percent, which makes it extremely vulnerable to price shocks and jeopardizes the security of supply. The oil company NIS is co-owned by the Russian company Gazprom Neft (65.5 %) and the Serbian Government.

The Government has announced that, by 2025, they would close down outdated thermal power plants and build several new coal-fired power plants: Nikola Tesla B3 and Kolubara B (2×750 MW), New Kovin (2×350 MW), Štavalj (300 MW) and Kostolac B3 (350 MW). By 2020, Serbia is planning to invest more than 3.8 billion euros in coal-fired thermal power plants, 3.8 billion euros in large hydro power plants and 0.6 billion euros in renewable resources.

In 2011, the share of renewable resources in the overall consumption amounted to 17.8 percent, mostly from large hydro power plants - Đerdap and Drinsko-Limske HPPs. The Government is planning to upgrade the existing hydro power plants and to construct several new - Great Morava (150 MW), Ibar (103 MW), Upper Drina (250 MW), Middle Drina (320 MW), the Pumped Storage HPP Bistrica (680 MW) and the Pumped Storage HPP Đerdap 3 (600 MW).

The use of renewable energy resources must be increased to 27 percent in final consumption, which is an obligation under the Treaty Establishing Energy Community. The investments could activate the potential of 4.3 Mtoe. Of this, biomass accounts for 2.7 MtoE; hydro potential for 0.6; geothermal resources for 0.2; wind for 0.2 and solar energy for 0.6 Mtoe.

In 2012, the total emission of CO<sub>2</sub> amounted to 25.806.330 tons. Serbia is planning to construct 2.85 GW of additional coal-fired capacities. The construction costs have been estimated at 6.7 billion euros, to which 419 million euros should be added annually for the costs of carbon-dioxide. The modernization and replacement of old plants in accordance with the provisions of the Industrial Emissions Directive requires the investments of 2.7 billion euros by 2018.

Serbia has a large potential for the development of renewable resources, and that further investments should be aimed in this direction, considering the future EU membership. 2.5 billion euros would be saved by replacing the planned new coal-fired plants with renewable resources. Serbia imports one half of energy and with the steady trend of consumption increase, it has to solve the energy efficiency problem urgently, through a better coordination of policies and activities, a significant financial support and coherence between private and public investments. Electricity losses amount to 215 million euros annually.