

Senegal

The Republic of Senegal (République du Sénégal (French), Sounougal (Wolof)) with its capital city Dakar (1.641.358 inhabitants, 1994) covers 196.722 km². The total population of 9,04 million leads to a population density of 46 inhabitants per km² with the share of 46 percent, living in urban regions.

Senegal was granted independence from France on April 4, 1960. The country joined with Gambia to form the nominal confederation of Senegambia in 1982. However, the envisaged integration of the two countries was never carried out, and the union was dissolved in 1989. After that, the country finally became independent with its own constitution which established the Republic of Senegal.

Due to economic difficulties, Senegal started a bold and ambitious economic reform program in January 1994. The reform was internationally supported and began with a 50 percent devaluation of Senegal's currency, the CFA franc, which was historically linked with a fixed rate to the French Franc. Additionally, government price controls state subsidies have been increased steadily. Due to the reform, Senegal made an important turnaround and increased the GDP growth of 2,1 percent in 1993 to a growth averaging 5 percent annually in 1995-99. The annual inflation has been decreased to less than 2 percent while investment rose steadily from 13,8 percent of GDP in 1993 to 16,5 percent in 1997 and finally amounted 4,37 million U.S. dollar in 2000. In the future the GDP is expected to rise 6 percent annually, while inflation is likely to hold at 2 percent.¹

As a member of the West African Economic and Monetary Union (UEMOA), Senegal is a supporter of the increased regional integration, combined with an unified external tariff. Even if it seems, that Senegal's economy is fine, Senegal faces urban problems like chronic unemployment, juvenile delinquency and drug addiction.

Senegal electricity consumption of 1,2 million MWh in 2000 was exclusively covered by fossil fuels. The Société Nationale d'Electricite (SENELEC), handles the generation, transmission and distribution of Senegal's electricity. While the governmental ownership in SENELEC was reduced to a 41 percent share in March 1999, a consortium of Hydro-Quebec (Canada) and Elyo (France) acquired a 34 percent interest in SENELEC. Further 10 percent were set aside for purchase by employees, and the remaining 15 percent of the SENELEC shares are traded on the regional stock exchange.² Due to the growing energy demand and the high number of non-connected regions, Senegal is utilizing several options to increase the generating capacity and to expand the access to electricity. A consortium of Hydro-Quebec and Chagnon International from Canada, and the local Keur Khadim, constructed an 37,4 MW oil-fired plant, which began operating in January 1999.³ As Senegal has no oil reserves, this plant was constructed with a option to utilise natural gas when sufficient supplies become available.

The natural gas consumption of Senegal counted 42,3 million cubic metres and was covered by exploiting the country's reserves of 3,17 milliard cubic metres. The overall oil

¹ World Bank - <http://www.worldbank.org>

² UPDEA - <http://www.updea-africa.com>

³ IEA 2002.

consumption of 9,12 million barrels was covered by imports. Up to now, there are no proven oil resources but by itself, and in conjunction with neighbouring countries, Senegal is promoting the increased discovery of potential resources. As there are no proven coal reserves, there is no contribution to the country's energy mix.⁴

Currently, Senegal's first independent power producer (IPP) project is under development. It consists of a 56 MW oil-fired plant, located about 20 kilometres from Dakar at Cap de Biches.⁵ The project is financed by the General Electric's Structured Finance Group, the World Bank's International Finance Corporation and the Italian service provider Sondel. This company, which became part of the consortium when it purchased a 30 percent interest, will be responsible for operation and maintenance of the plant.

Hydroelectric facilities were also planned to increase Senegal's electricity supply. The Organisation for the Development of the River Sengal (OMVS), which consists of Senegal, Mali and Mauritania has constructed two dams. The Diama dam, located in Senegal, was completed in 1986. The Manantali dam, built by the OMVS on a tributary of the Senegal River in Mali, was completed in 1987. The Manantali project was also to set up a 200 MW power station and 1.300 kilometres of transmission lines to the capitals of Senegal (Dakar), Mali (Bamako) and Mauritania (Nouakchott). Cost overruns and political problems between Mauritania and Senegal, cancelled the construction of both power facilities.

Due to large demand for energy in rural areas for cooking and to a smaller extent for heating, it can be stated that the availability in wood energy shrink, the acquirement of the wood fuels becomes a more and more laborious physical and economic burden for the households.⁶ Senegal recently began with a programme to strengthen the promotion of renewable energy. With financial help of the African Development Bank (AfDB) and the World Health Organization (WHO) the government is providing equipment to generate solar energy for health stations located throughout Senegal.

Senegal's municipal wastes and sugar cane bagasse are sufficient for a total electricity generation capacity of 42 GW. Most important is the agricultural residue of peanut shells from this large-scale industry of Senegal. The estimated amount of 197.500 tons would be sufficient for a total electricity generation capacity of 221 MW.⁷ Considering these biomass potentials, will help to promote the future implementation of bioenergy.

⁴ Energy data contain information of EIA 2002.

⁵ Energy in Africa - <http://www.eia.doe.gov>

⁶ LAMNET 2002.

⁷ WEC 2002.