

Argentina

The Republic of Argentina (República Argentina) with its capital city Buenos Aires (2.960.976, 1991) covers an area of 2.776.654 km². With a total of 37,032 million inhabitants, the population density is about 13 inhabitants per km². The urban population is with 89 percent very high.

Argentina is wealthy of a wide variety of cultural attractions, but its natural wonders are the primary draw. From the northern deserts, the southern Andean Cordillera and the magnificent desolation of Patagonia, Argentina's geography is varied and stunning. The elegant capital, Buenos Aires, is known for its sophistication, and European attitude.

Nevertheless, Argentina in total has various development problems, like an economy on the verge of collapse or an 'revolving-door' government that saw five presidents in two weeks. In order to solve the economic crisis, the government started to liberalise, deregulate and privatise the trade market. The International Monetary Fund (IMF) provided Argentina with additional monetary assistance in early September 2001, although most analysts indicate that this will not be sufficient to prevent further financial difficulties. Continued economic problems have led to increased political tension. Argentina was one of the first Latin American countries started privatising state-owned companies. Most public utilities, including telecommunications, airlines, power generation and distribution as well as water systems and railways are in the hands of the private sector.

Mostly, Argentina relies on natural gas and hydropower to cover its electricity needing which amounted 75,175 million MWh in 2000.¹ Fossil fuels contributed 60,3 percent, hydropower contributed 30,7 percent and nuclear power was used for 8,7 percent. The remainder of 0,3 percent came from other renewable energy sources.²

With around 3 milliard barrels of proven oil reserves and a production of more than 280 million barrels in 2000, Argentina is a significant participant in Latin American oil markets. Behind Venezuela, Mexico, and Brazil, Argentina was the fourth-largest oil producer in 2000. With a total oil consumption of 183,96 million barrels, the country was the region's third-largest oil consumer, after Mexico and Brazil. The exported over-production of almost 100 million barrels made the country the third-largest exporter, behind Venezuela and Mexico.

Argentina has the third largest proven reserves of natural gas in Latin America (after Venezuela and Mexico), at estimated 729 milliard cubic metres. With a consumption of 35,7 milliard cubic metres, Argentina overtook Venezuela to become, after Mexico, the region's second-largest natural gas consumer in 2000. Supply of Argentine gas currently covers the total consumption while demand is expected to increase rapidly in the coming decade.

Even though Argentina has some resources, coal is not a major component of the country's fuel mix. With a proven reserve of 424 million tons, the country produced 0,29 million tons and consumed the total amount of about 1,5 million tons in 2000. The difference was covered by imports from Australia, the United States and South Africa.

¹ EIA 2000. and SIEE 2000.

² EIA 2000.

Latin America's most advanced nuclear energy program and also the first nuclear plant was set up in Argentina. The 350-MW power plant, called Atucha I and the 650-MW plant, Embalse are fully operational. The third plant, Atucha II, with a planned capacity of 690 MW is still under construction. About 80 percent of the project is completed, but would require an support of estimated 800 million U.S. dollar to get finalised and therefore, construction currently has been halted. The government had intended to privatise all three plants as one unit. As of July 2000, privatisation had been put on hold indefinitely.

Argentina has an enormous potential for renewable energy and investors are starting to show significant interest. Sources of energy such as wind, solar, biomass and geothermal are possibilities for future energy production in Argentina. Currently, hydroelectric power is the only considerable renewable energy resource in Argentina. The use of wind power in Argentina traditionally has been limited to pumping drinking water to cattle and, overall, is still very much in its infancy. However, wind-based energy has been attracting significant attention recently as an economically viable source of power.

Argentina's most potential biomass resources are sugar cane bagasse and residues from forestry and wood processing. Table 4-5 shows the potential and the possible conversion yields of these resources.

Table Fehler! Kein Text mit angegebener Formatvorlage im Dokument.-1 - Potential biomass and conversion yields, Argentina 2002

Sugar cane bagasse	quantity of raw material available	7 million tons
	electricity generation capacity	74.063 kW
	electricity generation	618 TJ
	direct use from combustion	34.822 TJ
	total energy production	39.256 TJ
Black liquor	quantity of raw material available	6,9 million tons
	electricity generation capacity	106.840 kW
	electricity generation	1.431 TJ
	direct use from combustion	65.647 TJ
	total energy production	67.078 TJ

Source: World Energy Council, Survey of Energy Resources, 2002