

Ecuador

The Republic of Ecuador (República del Ecuador) with its capital city Quito (1.444.363 inhabitants) is the smallest country (276.840 km²) in the rugged Andean highlands and comprise about 12,65 million people. The population density of Ecuador is 45 inhabitants per km² and 61 percent of its total population are living in the urban regions of the country.

The Galapagos Islands, owned by Ecuador since 1832, are acknowledged as one of the world's greatest natural history treasures. Their diversity of plant and animal life are unique. Ecuador has extensive natural resources, notably oil in the Amazon region and diverse mineral deposits in the Andes.

Ecuador is the world's largest producer of bananas and one of the largest producers of shrimp, tuna, cacao and cut flowers. Since the early 1980s, oil exports have provided roughly half of export earnings and agricultural products the balance. Peace with Peru since late 1998 promises to roughly double exports to this Andean Community neighbour. Deteriorating economic performance in 1997 and 1998 was caused by a number of external shocks, including the El Niño weather phenomenon in 1997, a sharp drop in global oil prices and international emerging market instability.

Ecuador enjoyed 20 years of free and fair elections until January 2000, when a military-backed indigenous group took over the National Congress building. This resulted the removal of President Jamil Mahuad and the peaceful, constitutional swearing-in of Vice-President Gustavo Noboa as president the next day. Ecuador has generally not suffered from the widespread political violence and terrorism experienced by its neighbours, Peru and Colombia. President Noboa has brought a measure of calm and stability to the country. He replaced the national currency (Sucre) with the U.S. Dollar, a move that has improved economic conditions, and negotiated a standby arrangement with the International Monetary Fund.

This has managed to halt a disastrous devaluation and economic recuperation has begun. Inflation has been reduced to 22 percent from 91 percent in 2001. The economy, which declined 7 percent in 1999, gained 2,5 percent in 2000 and a further 5,4 percent in 2001. To avoid an economic crisis similar to that occurring in Argentina, the fiscal reform package submitted to Congress includes the adoption of a law to control government spending and the creation of a stabilisation fund from oil revenues, to be used only during periods of crisis.

In 2000, Ecuador's electricity consumption amounted 7,88 million MWh, of which 70 percent were produced with hydropower, while the remaining part was covered by the combustion of oil in thermal power plants. Roughly half of the country's electricity comes from the Paute hydropower plant. Due to a severe drought in early October 2001, Ecuador's government declared a state of emergency, as a large number of consumers were not provided with sufficient amounts of electricity.

Ecuador's power demand is growing rapidly, but generation capacity, transmission and distribution infrastructure are having problems in keeping pace. About 25 percent of the population remains without access to electricity, and demand is increasing in the areas that are electrified. In addition, there has been insufficient capital for maintenance, and parts of the power grid are in very poor condition. In November 2001, the World Bank approved a 23

million U.S. dollar loan to support Ecuador's efforts at modernising and expanding the electric power and telecommunications services.¹

Since oil was discovered in Ecuador in the 1970s, it has become an increasingly important part of the Ecuadorian economy. The country has 4,56 milliard barrels of proven oil reserves, with an production of around 146 million in 2000. Ecuador itself, consumed 54,38 million barrels while around 91,6 million barrels were exported. Petroecuador, the national oil company, which is producing about 56 percent of the country's total production, is attempting to attract foreign investment in the country's largest oil fields, and to boost production from 224.000 bbl/d to 600.000 bbl/d by 2005.²

Ecuador has no proven coal reserves while it has natural gas reserves of 28,6 milliard cubic metres. Due to a lack of the necessary infrastructure, the 2000 production and consumption was only 1,2 milliard cubic metres. A new power project which should help to lessen the dependency on hydropower, is a natural-gas-fired plant to be located near Machala. The 90 million U.S. dollar plant is to utilise natural gas from the Amistad field in the Gulf of Guayaquil, and is foreseen to be finished with a generating capacity of 130 megawatts by late 2002. A private financed project which will strengthen the electricity infrastructure is the construction of a 230-kilovolt grid to link the northern and southern parts of the country with a new hydropower station. This project will improve the existing interconnections with Colombia and Peru.

The current use of bioenergy is limited at self-sufficient energy applications in the sugar and timber industry. Nevertheless, the country has remarkable biomass sources. The industrial exploitation of agricultural products like sugar, coffee, cacao, rice, corn and bananas are producing residues which can be utilised in the bioenergy sector. The large-scale seafood production as well as the livestock farming are adequate for biogas generation. The sugar cane bagasse, produced by the sugar industry was estimated at 1,81 million tonnes in 1999.³

The exploitation of non-conventional energy sources is small, considering the country's potential. Under current regulations, the government of Ecuador promotes the use of all renewable energy resources including biomass. It has made available special financing through its Fund for the Electrification of Rural and Suburban Areas (FERUM). However, the special focus of the new electric authority, CONELEC (Consejo Nacional de Electricidad), along with the Latin American Energy Organization (OLADE), the United Nation's Economic Commission for Latin America and the Caribbean (CEPAL), and the German government's Technological Cooperation Organization (GTZ) are studies of the more promising geothermal projects.⁴

¹ World Bank 2002: 67.

² WEC 2002.

³ ISO 1999.

⁴ <http://www.conelec.gov.ec>