



SECTOR  
BIOFUEL AND  
RENEWABLE  
ENERGY



## BIOFUELS AND RENEWABLE ENERGY SECTOR

The 2016-2040 National Energy Policy promotes the use of renewable energy sources to improve access to energy and reinforce energy security.

The gross energy supply in Paraguay is made up of 40% hydroelectricity and 36% biomass (2020), which totals 76% from renewable sources.

This proportion is one of the highest in the region in terms of the energy matrix. Between 2010 and 2019, the energy supply grew at an average annual rate of 1.3%. For the same period, biomass consumption increased in the residential and commercial sectors by 20.7% and in the industrial sector by 23.7%.

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In 2019, biomass supplied 41.3% of total final energy consumption. In the same period, electricity consumption increased by 91%. In turn, consumption of liquid biofuels (ethanol) doubled due to the implementation of biofuel production projects, following the Biofuels Promotion Law of 2005.



## SECTOR POTENTIAL

Paraguay has excellent hydroelectric potential thanks to its hydrographic conditions and water courses that flow through the Paraguay and Paraná river basins.

There is a high potential for the use of solar energy throughout the country. The areas with the highest irradiation index are in Alto Paraguay, Boquerón, Concepción, Amambay, San Pedro, Canindeyú and Alto Paraná, with a maximum use between 1,850 kWh and 2,000 kWh per square meter per year.

Paraguay has the potential to produce forest biomass from plantations with fast-growing

species, mainly eucalyptus. With an average annual increase of 40 m<sup>3</sup>/ha/year, plantations are the best alternative for energy generation.

Some experience has been developed in the production and exploitation of biogas. According to available information on organic waste, biogas can be generated from waste located in sanitary landfills, mainly in urban areas. It is estimated that 4,000 tons of urban organic waste are generated daily, which results in a heat production of 4.6 million kilocalories per year.





## INVESTMENT INCENTIVE SCHEMES

- **Law 3009/2006** - "On the Independent Production and Transportation of Electricity (PTIEE)".
- **Law 2748/05** "On the promotion of biofuels, and its regulatory decrees".
- **Law 4890/2013** "Real property right of forest area, forest plantations for energy purpose".
- **Law 5444/15** "Promoting bioethanol consumption".
- **All current incentive schemes apply** (See [Country Profile](#)).



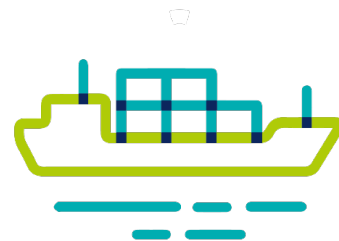
## MAIN SECTOR INDICATORS

**Gross Value of Production /  
Energy and Water** (2019-Central Bank)



**USD 3,529**  
Millions

**Exports** (2019 – REDIEX)



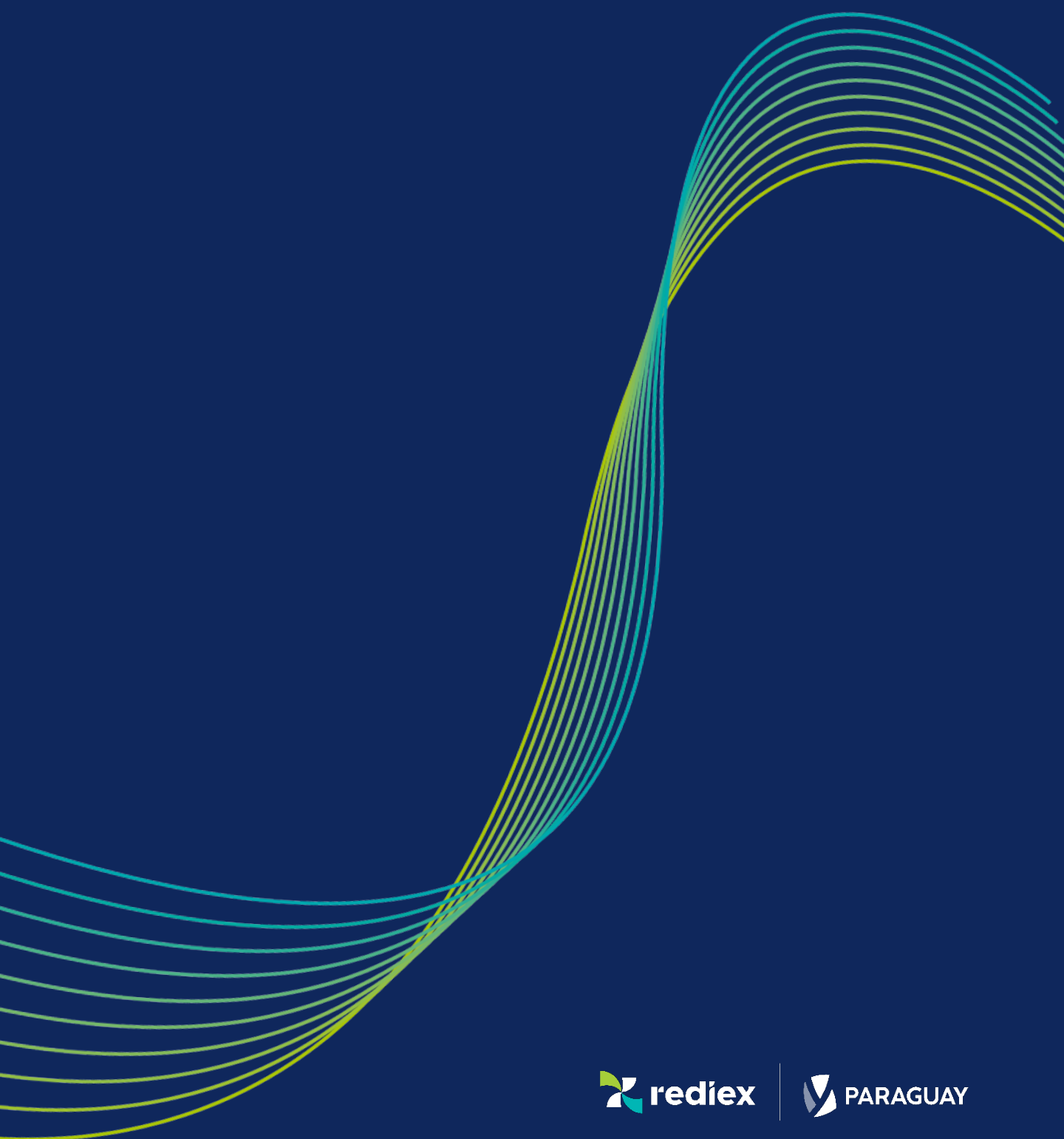
**USD 1,884**  
Millions



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