

# Renewable Energy Policy Brief

# VENEZUELA

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#### Acknowledgement

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## 1. Policy

The *Homeland Programme* 2013-2019 (<u>Programa de la Patria</u> 2013-2019) establishes the objective of developing renewable energy and diversifying the energy matrix.

## Electricity

The 2011 <u>Development Plan for the National</u> <u>Electric System 2013-2019</u> (PDSEN) sets the development of renewable energy resources as a medium-term (2013-2019) and long-term (2014-2033) goal. It sets a target of 613 MW<sup>1</sup> of additional renewable electricity capacity by 2019, of which 500MW from wind power.

The <u>Electricity Law</u> of 2001 allowed generation by independent producers. It provides that the state must consider efficiency and the use of renewable energy in the provision of electric service. The law reserved hydropower in the Caroní, Paragua y Caura rivers (the major Orinoco tributaries with most of Venezuela's developed hydropower) for the state.

The <u>Electricity Law</u> of 2010, which establishes a "socialist management model" and grants the state the monopoly of generation, transmission, distribution and commercialization of electricity, has amongst its principles diversifying the energy matrix and promoting renewable energy, and prioritizes the use of renewable energy in isolated systems.

In 2013, Venezuela began the process to develop the Law for the Use of Alternative Energy. It also developed a draft Plan for the long-term development of renewable energy in the period 2019-2031.<sup>2</sup>

A 2009 Pilot Plan for Wind Power Generation included **measurement campaigns** for wind power resource. <sup>3</sup> The pilot plan was part of a MoU with Portugal, involving Portugal's formerly state-owned energy company (Galp).<sup>4</sup> In 2011, the government was mandated to promote **industrial development** for the energy transformation, with priority for renewable energy technologies, by the *Law of Rational and Efficient Use of Energy* (Gazette 39823). A state-owned company (UNERVEN) was created to manufacture solar photovoltaic and small wind turbines (0.6-6 kW).<sup>5</sup>

**Direct development** by the government include long-term plans for developing 10GW of wind power in the Guajira region. In 2012, a first phase comprising a 76MW wind farm was under development.<sup>6</sup> As of 2013, 32MW were already operative.<sup>7</sup>

**Fiscal incentives** included <u>Decree 6994</u> of 2009, which provided VAT exemption for imported renewable electricity equipment for five years

Electricity Ministry <u>Resolution 2</u> of 2009 provided incentives for **self-generation** and **cogeneration**. The incentives, which expired in 2011, included the option to grant, for a period of two-years, total or partial exemption from fuel payments, expedited administrative procedures, VAT exemption and net metering. At least one 50MW project of biomass cogeneration (bagasse and oil) benefited from these benefits.<sup>8</sup>

In 2007 a <u>Resolution</u> (Gazette 38683) created a **national renewable energy registry**,<sup>9</sup> with mandatory inscription for renewable energy projects. The resolution defined renewables as solar, wind, hydropower, biomass, geothermal, ocean and hydrogen.

### Heating

The 2011 <u>Law of Rational and Efficient Use of</u> <u>Energy</u> stipulates that the ministries responsible of housing and energy will jointly promote the use of renewable energy for thermal use, such as hot water heating and

<sup>&</sup>lt;sup>1</sup> Technologies considered include wind power, solar, small hydro, bagasse cogeneration and biogas.

<sup>&</sup>lt;sup>2</sup> Source: *Memoria 2013 Ministerio del Poder Popular para la Energía Eléctrica*, República Bolivariana De Venezuela <sup>3</sup> http://www.menpet.gob.ve/noticias.php?option=view&idNot=1361

<sup>&</sup>lt;sup>4</sup> http://www.presidencia.gob.ve/Site/Web/Principal/paginas/classMostrarEvento1.php?id\_evento=1034

<sup>&</sup>lt;sup>5</sup>http://www.pdvsa.com/index.php?tpl=interface.sp/design/salaprensa/readnew.tpl.html&newsid\_obj\_id=11063&newsid\_temas=1

<sup>&</sup>lt;sup>6</sup> http://www.corpoelec.gob.ve/llegan-al-zulia-nuevos-componentes-para-parque-e%C3%B3lico-%E2%80%9Cla-guajira%E2%80%9D-para-consolidar-proyectos-de-ener

<sup>&</sup>lt;sup>7</sup> Source: *Memoria 2013 Ministerio del Poder Popular para la Energía Eléctrica*, República Bolivariana De Venezuela

<sup>&</sup>lt;sup>8</sup> See <u>Resolution MPPEE 019 of 2010</u>

<sup>&</sup>lt;sup>9</sup> http://www.menpet.gob.ve/sier/

heating and cooling in new and existing buildings.

## Energy Access

The programme <u>Sowing Light</u> (Sembrando Luz) was initiated in 2005 through a public foundation for electric development (FUNDELEC) with the objective of providing energy and water services (pumping, water treatment and/or desalination) in remote and indigenous areas through solar PV and hybrid (PV-wind-diesel) systems. The program includes the establishment of a network of 10 renewable energy service units to provide maintenance services. To date, it has installed over 3100 systems<sup>10</sup> with over 2.5MW serving over 257,000 people.<sup>11</sup> <u>Sowing Light</u> includes electrification of community buildings (1200Wp systems), private dwellings (600Wp or 300Wp systems) and "social goals" (3840Wp systems). The programme included donations of systems to Haiti and Bolivia.

The 2011 <u>Development Plan for the Electric</u> <u>System 2013-2019</u>, through the Unserved Areas Electrification Plan, aims to electrify communities farther than 70km from the grid with renewable energy. It identifies 2512 communities with 121,000 people for a first phase, comprising 63MW of solar PV and hybrid systems.

<sup>&</sup>lt;sup>10</sup> http://www.fundelec.gob.ve/?q=node/1097

<sup>11</sup> http://www.fundelec.gob.ve/?q=node/366

# 2. Statistics



3,197.7 PJ 326.8 PJ

#### **Total Primary Energy Supply**



Total Primary Energy

Supply

31.6 PJ

295.3 PJ

Share in total

renewables

9.7%

90.3%

Total Of which renewables

Total includes electricity trade

2012



### **Renewable Power Capacity**

10.2%



## **Electricity Generation**

		Electricity generation	Share of renewables			Electricity generation	Share in total renewables
2000	Total	85,271.0 GWh		2012	Hydropower	82,008.0 GWh	100.0%
	Of which renewables	62,886.0 GWh	73.7%				
2012	Total	126,516.0 GWh					
	Of which renewables	82,008.0 GWh	64.8%				



2,111.7 PJ

31.4 PJ

1.5%



		Total Final Energy Consumption	Share in total renewables
2012	Solid biomass	31.4 PJ	100.0%

2012

Total

Of which renewables

Sources for these statistics: IRENA, IEA, UN

# **Renewable Energy Policy Briefs**

This brief is part of an IRENA series providing a comprehensive and timely summary of renewable energy policies in Latin America (including Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay, and Venezuela).

The brief brings together the most up-to-date information on renewable energy public policies for the power, heating and transport sectors, and also includes a section on energy access policies. The objective of this brief is not to provide an assessment of the reported policies. The brief is primarily based on the information contained in the <u>IEA/IRENA Joint Policies and Measures Database</u>, complemented with information drawn from: (i) additional existing legislation, (ii) official government sources such as plans, reports and press releases, and (iii) input from country policymakers and experts. While the brief focuses on policies at the national level, sub-national policies are also included where relevant. Specific projects or programmes implemented by actors such as international organisations, development partners and the private sector are beyond the scope of this brief.

The information contained in this document is posted on IRENA's <u>REsource</u> web portal, will be used to update the <u>IEA/IRENA Joint Policies and Measures Database</u>, and will form the basis of IRENA's future policy work in Latin America.



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