IRENA
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Renewable Energy Policy Brief

ARGENTINA

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The International Renewable Energy Agency (IRENA) is an intergovernmental organisation that supports countries in their transition to a sustainable energy future, and serves as the principal platform for international co-operation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy. IRENA promotes the widespread adoption and sustainable use of all forms of renewable energy, including bioenergy, geothermal, hydropower, ocean, solar and wind energy, in the pursuit of sustainable development, energy access, energy security and low-carbon economic growth and prosperity. www.irena.org

Acknowledgement

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1. Policy

Electricity

Argentina has a **target** to reach 8% of renewable electricity generation by 2016, established in 2006 by Law 26190.

In order to reach its target, in 2009 Argentina launched an **auction** through its national energy company (ENARSA). The auction, known as "GENREN" aimed to deploy 1000MW of renewable electricity capacity distributed among technologies as follows: 500 MW of wind energy; 150 MW of liquid biofuel-fired power generation; 120 MW of solid urban waste; 100 MW of biomass; 60 MW of small hydro; 30 MW of geothermal; 20 MW of solar; and 20 MW of biogas. GENREN offered a 15-year Power Purchase Agreement (PPA) denominated in USD. In 2011, Resolution 108 allowed for **direct contracting** of renewable energy capacity, also with 15-year PPAs denominated in USD.

Prior to the GENREN auction, the 2006 Law 26190 provided 15-year **feed-in tariffs** for all renewable energy sources. Tariffs were as follows: USD 0.29[1]/kWh for solar PV and USD 0.005/kWh for wind, geothermal (<30MW), tidal and waves, biomass, biogas, and small hydro (<30MW). The tariff was to be funded from a Fiduciary Fund for Renewable Energy, financed by a tax on electricity of USD 0.10 /MWh, levied on large distribution and wholesale companies. Law 26190 superseded Law 25019 of 1998, which promoted exclusively wind and solar energy and had established a feed-in tariff of USD 0.01 USD/kWh for wind.

In 2005 Argentina created the National Strategic Plan for Wind Energy. The plan, which was not implemented, aimed to install 300MW of wind power in three years with 80% local component. The plan also contemplated the elaboration of a national wind Atlas and has resulted in a measurement campaign in collaboration with the Regional Centre for Wind Energy (CREE) and financed by the Federal Investment Corporation (CFI).

Fiscal incentives were included in both Law 26190 and its predecessor Law 25019, which allowed for deferred tax payments and provided 15 years of "fiscal stability" to existing projects whereby, during that period, the overall fiscal burden of renewable energy projects cannot be increased by means of augmented, modified, new or additional taxes and fees. Decree 562/2009, which regulates Law 26190, provided for accelerated depreciation and for VAT refunds after 3 years.

Federal laws on renewable energy invites provinces to adhere to the legislation and develop their own **province-level incentives**. For instance, Decree 562/2009 developing Law 26190 of 2006 invited provinces to adhere to Law 25019 and to establish provincial fiscal incentives such as exemptions from revenue tax, local and administrative fees and property taxes. Some province-level policies include:

- Province of Buenos Aires – Law 12603 of 2001 exempts renewable energy projects from property tax for 10 years, provides USD 10/MWh for 10 years, and facilitates financing through long-term low-interest loans from the Buenos Aires Province Bank.
- Province of Chubut – Law 4389 of 1998 exempts renewable energy projects from province taxes for 10 years and provides USD 5/MWh for wind power complying with a set of local content requirements
- Province of Mendoza – Law 7822 of 2008 sets a target of 15% renewable electricity consumption by 2023 and provides exemption from provincial taxes to renewable energy projects.
- Province of Misiones – Law 4439 of 2008 establishes a provincial framework for the promotion of renewable energy and creates a fund for the promotion of renewable energy and biofuels.
- Province of Neuquén - Law 2596 of 2008 provides additional USD 1/MWh[2] for 15 years.
- Province of Santa Cruz – Law 2796 of 2005 provides exemption from property tax and all province taxes

[1] Feed-in tariffs were set in local currency. Conversions to USD use the exchange rate the day the law was approved. The unconverted figures in this paragraph are as follows: 0.9ARS/kWh; 0.015 ARS/kWh; 0.30ARS/MWh; 0.01 ARS/kWh
[2] Set in local currency, conversion rate as of date of the law for this and all the following Province-level incentives.

during ten years to the manufacturing of renewable energy equipment. It also establishes a subsidy of USD 3.45-10.30/MWh. Both the exemption and subsidy are variable depending on the percentage of local content.

The **definition of hydropower** is up to 30MW for the purposes of policy support under Law 26190. Provincial incentives may set other thresholds. For example, Province of Santa Cruz Law 2796 applies to hydropower installations up to 15 MW. Larger than 30MW hydropower projects are considered on a case-by-case basis, involving the relevant provinces and, in most cases, the federal government.

Transport

Argentina has a 10% **blending mandate** for biodiesel (Resolution 390/2014) and bioethanol (Resolution 44/2014).

The cornerstone of biofuel policy in Argentina is the Biofuels Law (Law 26093) of 2006 and the Decree 109/2007 regulating it. The Biofuels Law applies to biodiesel, bioethanol and biogas. It originally set a blending mandate of 5% for bioethanol and 5% for biodiesel blend effective in 2010. The bioethanol mandate was increased in September 2014 to 10% (Resolution 390/2014). The biodiesel mandate was increased to 7% in 2010 (Resolution 554/2010) and to 10% in 2014 (Resolution 390/2014).

Under the Biofuels Law two regimes were established, the "Regulatory Framework" (Chapter I) and the "Promotion Framework" (Chapter II). The regulatory framework regulates the rules and responsibilities of producers. The "Promotion Framework" grants fiscal and other benefits but, after 2010, those benefiting from the "promotion framework" have to sell their production at regulated prices in order to fulfill the national blending mandates. In practice, most producers did not choose the benefits of the "Promotion Framework" and focused instead on the export market under the "regulatory framework." The resulting lack of sufficient production capacity under the regulated "Promotion Framework" lead to a potential shortage to fulfill the biodiesel blending mandate. This was resolved by an agreement (Resolution 7/2010) between the industry and the government establishing individual and collective quotas for biodiesel producers to supply the Argentinean market. This agreement has been extended and renewed since, reflecting changes in the export market. Law 26.334 of 2007 on Bioethanol included sugar producers under the Biofuels Law.

Argentina offers **fiscal incentives** for the production and export of biofuels. The 2001 Biodiesel Competitiveness Plan (Decree 1396) aimed at promoting investment in biodiesel facilities through exemptions from a fuel tax[3] and the capital gains tax. Local authorities were encouraged to provide additional tax exemptions on production and storage facilities. Local authorities are also responsible for final permitting. Decree 1396 has been credited with the establishment of biodiesel producing facilities in major grain ports. The Biofuels Law provides exemption from a fuel tax[4] and other fees for biofuels intended to fulfill the blending quotas

Differential export taxes for biofuels versus other products derived from the same feedstock promoted the export of biofuels, especially biodiesel. For example, in 2008 export taxes were 35% for soy bean, 32% for soy oil, but only 5% for biodiesel.[5] Resolution 126/2008, changed the biodiesel export tax to a nominal 20%. In May 2014, the biodiesel export tax was reduced to 11% (Law 26.942).

Some provinces also enacted tax exemptions and other incentives for biofuel producing facilities following the Biofuels Law, such as Province of Buenos Aires Law 13.719, Province of Córdoba Law 9.397, and Province of Misiones Law 4439.

An interesting feature for biodiesel and biogas producers is that they can choose to benefit from the Biofuels Law, or from Law 26190 on production of renewable electricity, notably the 150MW of liquid biofuel-fired power generation auctioned under GENREN and direct contracts through Resolution 108.

Energy Access

In 1999 Argentina launched the PERMER programme for rural electrification with renewable energy. PERMER was financed through a World Bank loan (USD 30 million), a

[3] Fuel transfer tax

[4] Fuel transfer tax

[5] Topalian & Lanardonne. "*El Marco Regulatorio de los Biocombustibles en la República Argentina*"

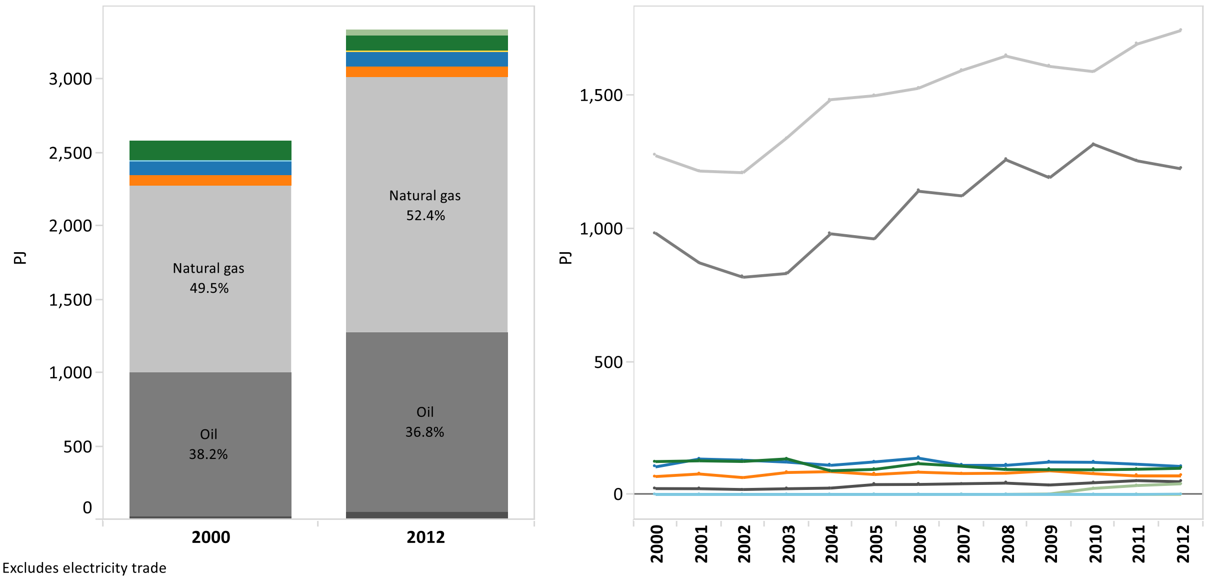
UNEP grant (USD 10 million), federal and provincial governments, and contributions from concession companies and users.

PERMER provides companies a 15-year concession to install and maintain subsidized renewable energy systems. For residential systems 79% of the cost is subsidized by PERMER. Users pay about 2% of the installation cost upfront, and the remaining 19% is covered by the concession company, which then recovers the investment plus O&M costs through a flat monthly fee for the duration of the concession.

At the end of 2012 PERMER had resulted in the electrification of 1894 public schools, 361 public service facilities and 25071 households.

2. Statistics

Total Primary Energy Supply



Excludes electricity trade

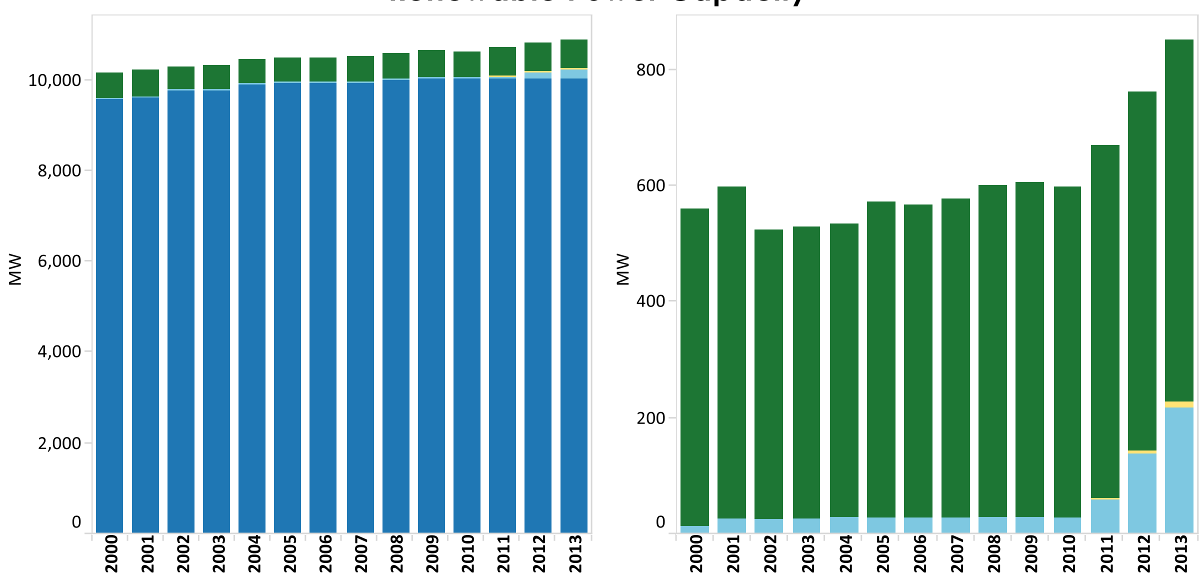
Liquid biofuels
Solid biomass
Solar
Wind
Hydropower
Nuclear
Natural gas
Oil
Coal

		Total Primary Energy Supply	Share of renewables
2000	Total	2,578.1 PJ	
	Of which renewables	227.5 PJ	8.8%
2012	Total	3,359.3 PJ	
	Of which renewables	245.3 PJ	7.3%

Total includes electricity trade

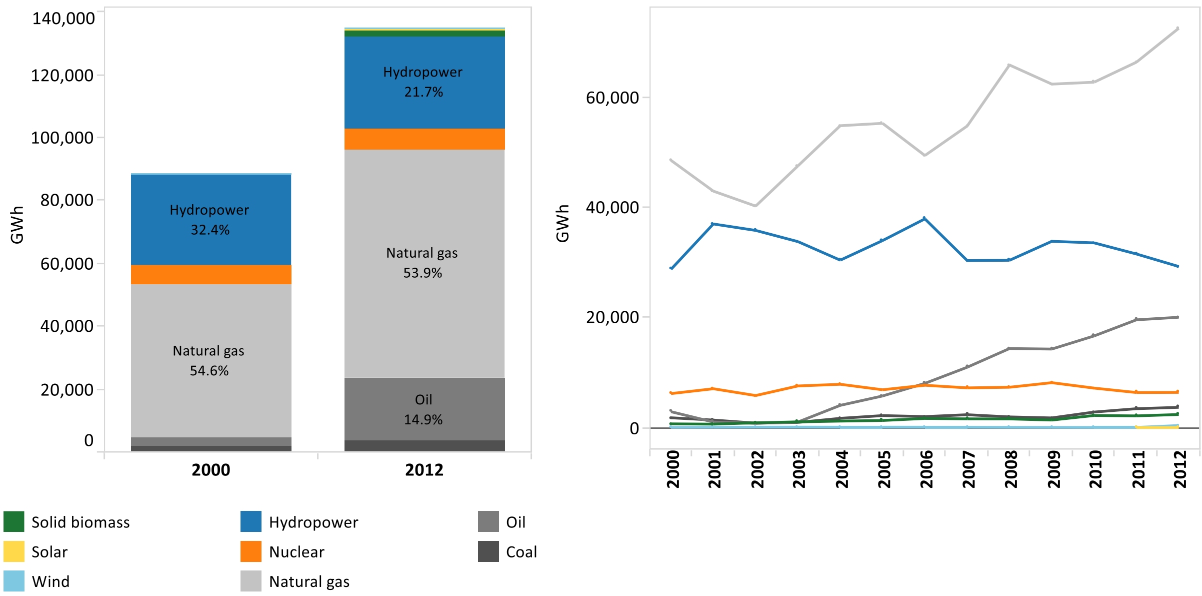
		Total Primary Energy Supply	Share in total renewables
2012	Wind	1.3 PJ	0.5%
	Solar	0.0 PJ	0.0%
	Liquid biofuels	40.1 PJ	16.4%
	Solid biomass	98.4 PJ	40.1%
	Hydropower	105.4 PJ	43.0%

Renewable Power Capacity



Solid biomass
Solar Photovoltaic
Onshore Wind
Hydropower

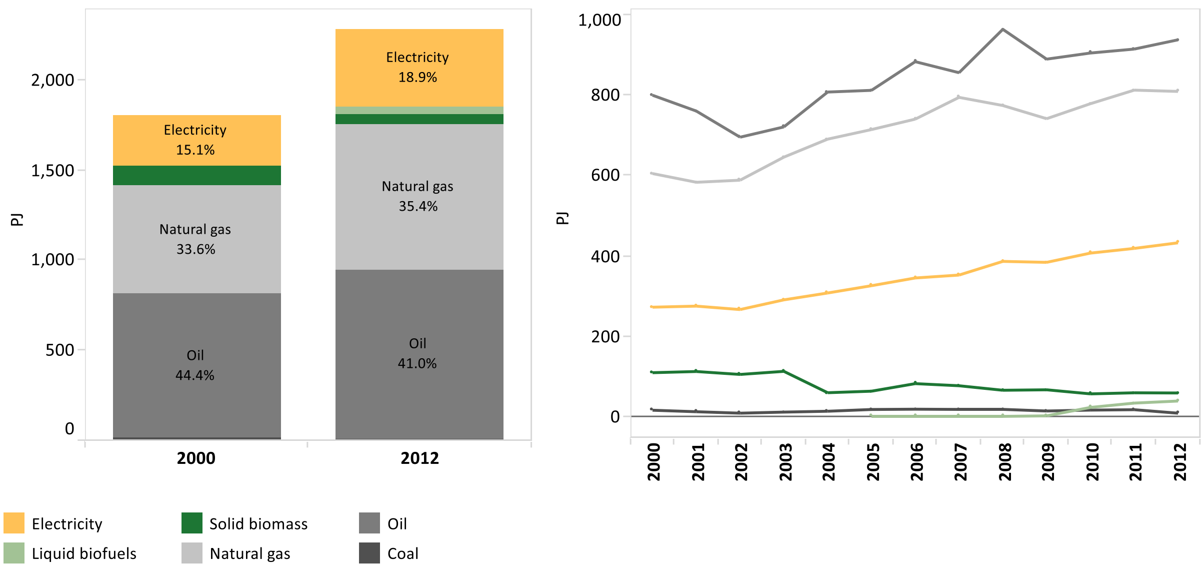
Electricity Generation



		Electricity generation	Share of renewables
2000	Total	88,910.0 GWh	
	Of which renewables	29,482.0 GWh	33.2%
2012	Total	134,776.0 GWh	
	Of which renewables	32,035.0 GWh	23.8%

		Electricity generation	Share in total renewables
2012	Wind	369.0 GWh	1.2%
	Solar	8.0 GWh	0.0%
	Solid biomass	2,373.0 GWh	7.4%
	Hydropower	29,285.0 GWh	91.4%

Total Final Energy Consumption



		Total Final Energy Consumption	Share of renewables
2000	Total	1,798.1 PJ	
	Of which renewables	109.1 PJ	6.1%
2012	Total	2,280.5 PJ	
	Of which renewables	97.5 PJ	4.3%

		Total Final Energy Consumption	Share in total renewables
2012	Liquid biofuels	38.8 PJ	39.8%
	Solid biomass	58.7 PJ	60.2%

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 IEA/IRENA Joint Policies and Measures Database, 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 REsource web portal, will be used to update the IEA/IRENA Joint Policies and Measures Database, and will form the basis of IRENA's future policy work in Latin America.

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