Bloomberg NEW ENERGY FINANCE

RENEWABLE ENERGY - LATIN AMERICA - ANALYST REACTION
20 April 2016

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1. ARGENTINA'S NEW

Argentina opens the doors to clean energy

The enactment of Argentina's new renewables law has the potential to re-ignite the country's largely dormant clean energy sector. Passed in October 2015, Law 27.191 includes a new clean energy target, a new fund to support renewables, and fiscal incentives. At the end of March 2016, the law's regulatory decree was published, signalling the start of implementation. We discuss the new law's incentives and assess its impact on future large-scale clean energy investment in Argentina.

- Law 27.191 was approved at the end of Cristina Kirchner's government with the relevant regulations finalised in March 2016. The law sets renewable energy consumption targets while extending tax benefits and exemptions for new clean energy investments. Argentina plans to publish rules for a reverse auction in May with an eye toward contracting 1GW of clean capacity in H2 2016.
- The law introduces a Fondo Fiduciario para el Desarrollo de Energías Renovables (FODER, a clean energy fund) to support financing for new renewable projects or expanding existing ones. The government will allocate for the fund \$811m that will be most available for projects competing in the upcoming auction, as a first step.
- The main tax exemptions available via Law 27.191 are VAT rebate on the purchase, manufacture or import of new capital equipment and construction, and accelerated depreciation.
- While it essentially inherited Law 27.191, Argentina's new government has since taking office
 in December 2015 focussed on opening the country to foreign investment. Energy generally,
 and clean energy in particular, are part of this plan. In response, foreign investors have begun
 reconsidering Argentina, with a mix of excitement and caution.

By the numbers

- Argentina will allocate \$811m to the clean energy fund FODER in 2016.
- In H2 2016, Argentina will seek to contract 1GW of power via a long-term auction.
- The government plans to add 3GW of installed capacity from renewable sources in the next three years, attracting around \$5bn over that time.

ARGENTINA'S NEW RENEWABLE ENERGY LAW

Argentina's clean energy sector has progressed very slowly over the past decade. The country's main renewable energy legislation, Law 26.190, was introduced at the end of 2006 under Néstor Kirchner's government, but had limited impact. The clean energy mandate of 8% by 2016 it established were far from being achieved and the feed-in tariff it introduced was never implemented.

Argentina has held one tender to contract renewable energy. That "GENREN" auction received 1.4GW from developers and resulted in 895MW in contracts signed. Among winning projects, however, only 128MW were ever commissioned. Argentina's closed economy, its inability to

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attract international investors, and its ineffective policy incentives all prevented further clean energy development.

Today, renewables excluding hydro represent only 1% of the total installed capacity of 32.6GW.

In generation terms, through the first two months of 2016 wind and solar accounted for just 0.4% of total generation, according to Argentina's National Atomic Energy Commission (*Comisión Nacional de Energía Atómica*, CNEA).

Figure 1: Argentina installed capacity (MW) Figure 2: Argentina power generation, Jan-Feb 2016 (GWh) Nuclear_ Wind 1% Wind Nuclear. 5% 0.4% 5.7% Hvdro Hydro 27.1% 34% 32,6GW 27.8GWh Fossil Fuels Fossil Fuels 66.8% 60% Source: CNEA Source: CNEA

At the end of 2015, Cristina Kirchner's government introduced Law 27.191, a revision of 26.190. Published in October 2015 with regulations completed in 31 March 2016, the new law now takes effect at a very different point in Argentina's history with a newly installed government seeking to rebuild relations with foreign investors and encourage private development in the power market. In the next sections we discuss each of the major changes introduced by Law 27.191: the renewable power consumption mandate, its tax incentives, and a clean energy fund to support development.

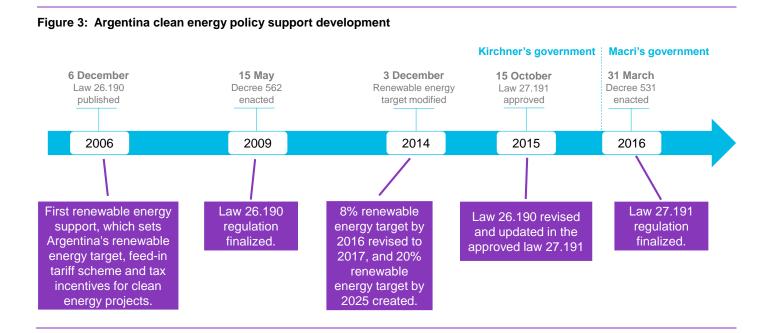




Table 1: Renewable

December of each year

Target

8%

12%

16%

18%

20%

energy targets, by

Year

2017

2019

2021

2023

2025

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Renewable power consumption mandate

Law 27.191 sets renewable power consumption targets for all Argentina's electricity consumers. Those connected to the wholesale market or the regular retail system whose demand profile exceeds 300kW that fail to comply will be penalised based on their unmet quota multiplied by a variable determined by the per-MWh price of a diesel plant using imported fuel. In 2015, consumers and retail consumers with demand over 300kW represented about 50% of Argentina's total power consumption, according to CNEA. Renewable energy consumption targets will be implemented gradually (Table 1).

To meet their individual goals, consumers can buy clean power directly from generators or through providers. Specifically, this can be done in one of four ways:

- Bilateral agreements with generators via distribution companies;
- · Bilateral agreements directly with generators;
- Power purchases from energy traders;
- Power purchases from national system and wholesale market operator Compañia Administradora del Mercado Mayorista Eléctrico (CAMMESA).

The law mandates a maximum energy purchase price of \$113/MWh through the first two years of enforcement. After two years this cap is revised by *Autoridad de Aplicación*¹.

Tax incentives

Decree 531 proposes a number of new tax benefits but is not entirely specific on who can qualify to receive them. Further guidance will be required to know if manufacturers or others qualify.

What is clear now however is that all tax benefits can apply to generation, cogeneration and self-generation renewable energy projects with disbursements of at least 15% of project's total expected investment, up to 31 December 2017. The incentives are:

- A value-added tax (Impuesto al Valor Agregado IVA) rebate available on the purchase, manufacture or import of new capital equipment and construction;
- Accelerated depreciation on assets (*Impuesto a las Ganancias*). This incentive encourages
 businesses to purchase new assets. It results in greater depreciation expense and smaller
 taxable income in the earlier years of an asset's life. Investors have two period options that
 they can apply accelerated depreciation:
 - Starting from new goods fiscal license period, or;
 - Starting from new goods purchase, manufacture or import period.
- Non-operating losses may be rolled over for 10 fiscal years (above the usually permitted five years);
- Exemption from corporate tax on asset-generated dividends to the extent they are reinvested in a new infrastructure project in the country;
- Projects using at least 60% locally-manufactured content (or 30% in the case of projects that
 can prove the lack of local content) receive a credit to offset taxes up to 20% of the project's
 local-content related costs.

Clean energy players can apply to qualify for all of the above tax credits simultaneously.

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¹ Autoridad de Aplicación is an entity created to coordinate law rules compliance.



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Tax benefits must be approved by *Autoridad de Aplicación*, attested by the Inclusion Certificate (*Certificado de Inclusión*) – issued after the renewable project has been evaluated in accordance with law rules.

Clean energy fund

To support project financing, the law creates what is intended to be a self-sustaining clean energy fund, *Fondo Fiduciario para el Desarrollo de Energías Renovables* (FODER). Capital for this is expected to come from the following:

- The national treasury, which will contribute at least 50% of what Argentina is deemed to have saved from reducing fossil fuel consumption;
- Consumers, who will pay through an additional tax on their monthly bills;
- Individual investors, who will be sold stakes in the fund;
- Pension funds, who also will take stakes;
- The recovery of principal and interest of loans granted.

FODER will support clean energy projects via project finance loans and by providing guarantees for all tendered PPAs that apply for development banks funding. IDB and FMO development banks have shown interest in fund auctioned projects with FODER guarantee, but no official information was published confirming it. Projects to be built with higher levels of locally-sourced equipment and with lower risk profiles will have priority.

For 2016, Argentina's government plans to allocate \$811m to the fund. This amount will likely be available for winning projects in the upcoming auction, expected to be announced in May 2016.

2. LAW 27.191 IN PRACTICE

Upcoming clean energy auction

The finalisation of Law 27.191's regulations also brought news of an upcoming renewable energy auction planned for May 2016. This too is part of the government's ambitious plan to add 10GW of renewable energy up to 2025. It is expected that around 3GW of clean energy projects will be developed in the first two to three years, bringing around \$5bn in investments.

The upcoming auction seeks to award long-term contracts associated with 1GW of new capacity, mostly from wind and solar projects. The auction is also expected to include biomass and small hydro projects (<50MW). Technologies will not compete against one another but only against themselves for bids. As Argentina has exceptional wind resources, many of the auctioned energy are expected to be for wind projects.

Projects with the lowest offers and in the latest phase of development will receive preference in the final selection of projects. The regulation offers no details on local content but players in the market have told BNEF that they expect projects with more locally-made equipment to receive priority. Geographic diversity can also be taken into consideration. Argentina has three wind turbine manufacturers: IMPSA, NRG and INVAP.

Employing a model similar to what has successfully been implemented in Uruguay, the Argentina government has established a new office to oversee the process. That office is also seeking support from an unnamed development bank to make local PPA's more bankable, the Energy Ministry has said. The move is intended to secure better financial conditions for the auction's winning bidders.

The diagram below highlights what the Ministry calls Argentina's potential "tendered PPAs cash flow diagram." All future auctions will operated under similar rules thanks to the new law.



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National Treasury Funding **Sponsors** Lenders **Public Offerings Pension Funds** Solvency Clean Energy Equity Loan Loan Guarantee **Multilateral Banks Fund** Repayment (under **Climate Funds** negotiation (FODER) Renewable Loan **Energy Project** Guarantee to PPA Dividends Guarantee Charge Company Renewable PPΔ Energy **Electricity** Monthly Payment of Electricity Bills Offtaker **End Consumers** Monthly Billing through DistCos (CAMMESA) Energy Flow PPA Payments Funding

Figure 4: "Tendered PPAs cash flow diagram"

Source: Argentine Ministry of Energy and Mines

Outlook

While Decree 531 provides greater specificity than ever about how Argentina plans to promote clean energy growth, it leaves many questions unanswered about how the country's revamped power market will work. To fill in the additional blanks, the government plans to release further regulations in coming weeks.

The law outlines a very tight timeline for Argentina to achieve its first clean energy consumption milestone. Given that, it is expected this timeline will be adjusted sometime after the first auction is held. The change could mean a lower short-term target and the potential exemption from penalties for consumers who sign PPAs for clean energy delivery at later dates.

To some degree, how the timeline gets adjusted will be contingent on how successful the auction proves to be with the government to some extent taking a wait-and-see attitude toward making adjustments. The ultimate goal is to build a stable, transparent market where clean energy development can thrive.

As wind and solar have short construction timelines, it is possible to have auction-wining projects on line within two years. Despite a decade of relative dormancy, Argentina has quite a large number of renewable projects in the country in the pre-development stage seeking PPAs and financing. According to BNEF's database, Argentina has almost 5GW of clean energy projects not commissioned, but in permitted, announced and under construction phases. The auction may be the solution for part of these projects.



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