



# Experiences in Renewable Energy Auctions in Latin-America

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## The auctions are the most used mechanism in LAC, 85% of the RE power was contracted through auctions

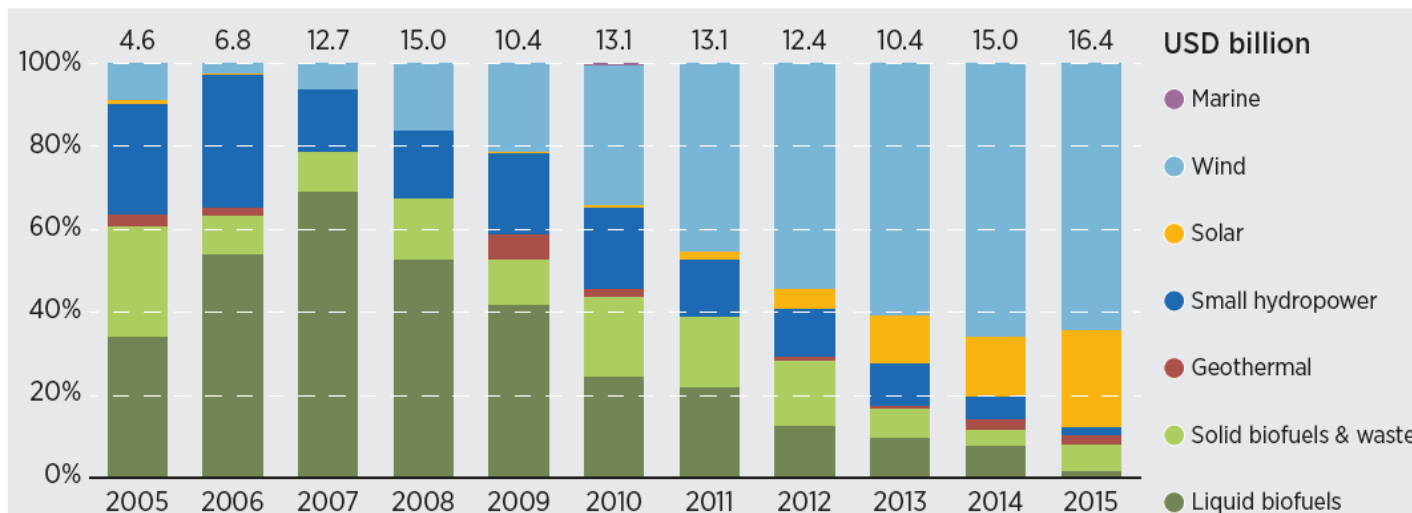
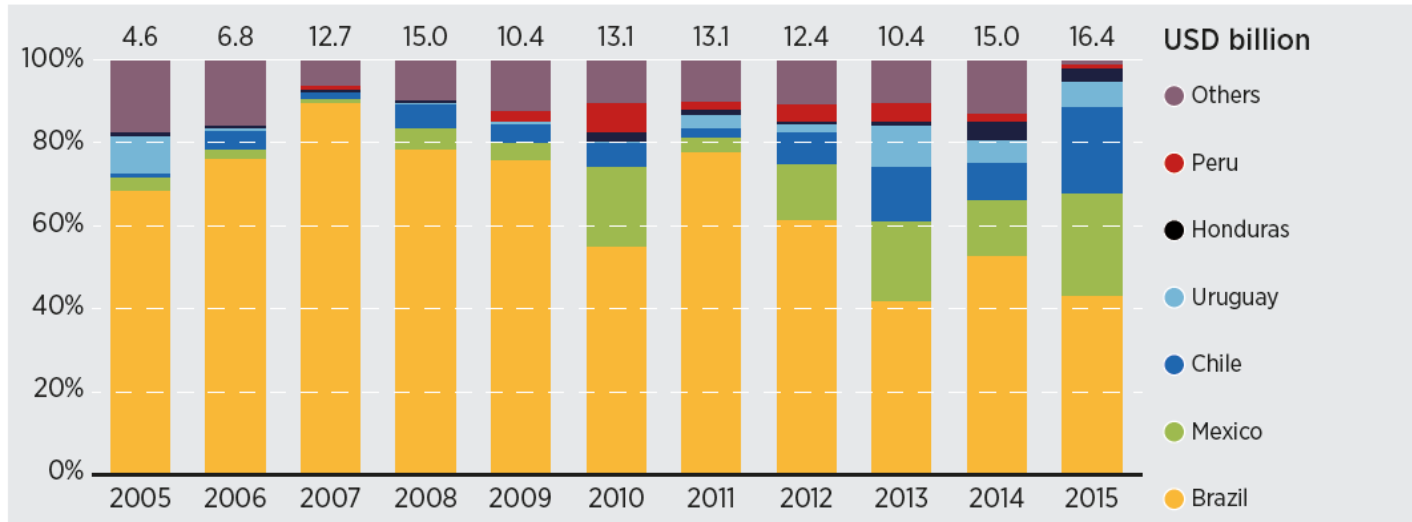
At least eleven countries have experience in renewable energy auctions, namely: Argentina, Brazil, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru and Uruguay.

Auctions have proliferated thanks to:

- Continuous **reduction of the costs** of the renewable technologies;
- **Internationalization** of renewable energy project developers;
- Development of **local markets**;
- **Learning curve** of policy makers in designing and implementing RE auctions.

RE auctions in LAC have shown impressive results such as: wind power in Peru 37,49 USD/MWh; and 20,57 USD/MWh for solar in Mexico.

# LAC countries has historically supported lowest cost technologies



Targets are **a key aspect for the confidence.**

Ideally, the RE targets should be **ambitious but realistic**, technology specific, with an indicative yearly pathway, formally linked to the auctions and with clear rules for monitoring, revision and update.

Both **Brazil and Mexico** have indicative targets for different renewable technologies in their **national energy planning documents**, which are reviewed annually.

**Peru** has implemented auctions to achieve the statutory target **set by law** of 5% of electricity from renewable sources, excluding hydroelectricity.

In 2016, **Argentina** approved the RenovAr **Renewable Energy Plan 2016-2025**, which includes targets of 8% of electricity from renewable sources in 2018 and 20% in 2025.

**Brazil** (ANEEL), **Uruguay** (URSEA) and **Peru** (OSINERGMIN) have opted for the **regulator** as the authority responsible for the auctions. **Argentina** and **Mexico** have opted for the **market operator** (CAMMESA) and the **electricity system operator** (CENACE) respectively. These Institutions **enjoy sufficient capacities and full autonomy**. They make all the structured information of past and ongoing auctions publicly available in **transparency portals**.

While the renewable energy demands the publication of a multi-year calendar with dates of auctions and volumes to be auctioned, this is a very ambitious exercise.

**Having regulation**, and doing the **announcement well in advance**, in order to prepare a competitive offer, seem to be sufficient and necessary conditions to promote competition.

With the aim of **avoiding underbidding** and failure of projects, **requirements have increased:**

- For **project developers**: besides the administrative, legal and financial solvency, a minimum experience in similar projects is requested.
- **With respect to the degree of development of the projects** and adapted to each technology: connection permit, resource analysis, environmental impact study.

**Financial guarantees** have been the main instrument to promote the seriousness of the bids.

There are two main bond requested: **bid bond** for the awarded bids to sign the PPA and the **completion bond** from the signature of the PPA to the entry into operation of the project. There is a clear correlation between low bonds and failure of projects.

Other good practices: **auction energy, sealed bid, pay the price offered (paid as bid), include ceiling prices, and the option of not to publish them.**

**Paid as bid** has turned out to be simple to implement effectively and efficiently. Only variation is Uruguay offering a prime based on local content targets.

The **sealed bid** auction **is simple** to implement, it is the most popular and has given optimal results.

**Ceiling prices are necessary.** Not establishing them can imply an unexpected cost. Two question marks are their calculation and whether they are published, before the auction.



Renewable energy auctions in LAC show a clear tendency towards **sophistication** and refinement in order to achieve different **secondary objectives** beyond the minimum price.

Among the secondary objectives are:

- Industrial development and job creation;
- The integration of variable generation in the grid;
- The optimal location of the projects;
- Early entry in operation (Argentina, Uruguay);
- The reduction of environmental impacts.



# Thank You!

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