





Solar Energy in Latin America: Today and Tomorrow



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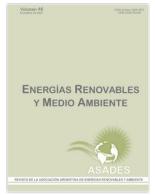




Argentinian Association of Renewables Energies and Environment

- 1. Environmentally conscious architecture and habitat
- 2. Solar energy: thermal, agricultural, chemical, and industrial applications
- 3. Solar energy: photovoltaic conversion
- 4. Wind, geothermal, tidal, hydraulic, biomass, and biogas energy
- 5. Efficient and rational use of energy
- 6. Technologies associated with renewable energies
- 7. Solar radiation and climate
- 8. Renewable energies, society, and environment
- 9. Energy storage systems







PROCEEDINGS

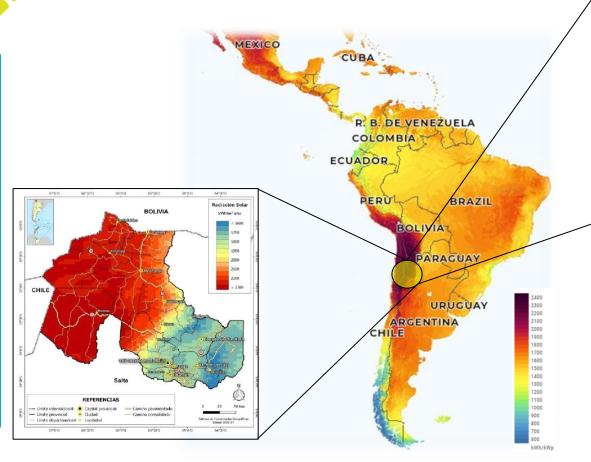
ERMA

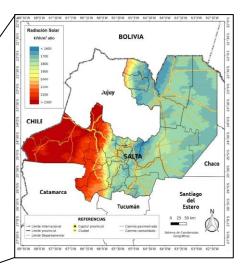
AVERMA



Let's meet in Salto-Uruguay, next year!

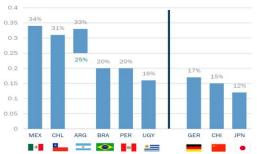
Solar radiation in LATAM





- Northern region has exceptional radiation levels and terrain conditions, comparable to those in Atacama region
- PV capacity factors range between 25% and 33% (using tracking system).

Selected Countries: Solar Capacity Factors





Solar energy developments in Argentina Some key features

- ✓ Argentina installed 307 MW of new PV capacity in 2024, according to reports from energy market operator CAMMESA.
- ✓ The country's total installed PV capacity reached 1673 MW by the end of December 2024.
- ✓ **Distributed generation added 28 MW last year**, bringing the total to 58.9 MW from 2290 generating units, with the commercial-industrial segment accounting for 78.1%, according to the Ministry of Energy.
- ✓ Argentina's total installed capacity stands at 43351 MW, with thermal power making up 58%
- ✓ The Argentine Northwest-NOA leads in installed solar capacity with 850 MW, followed by Cuyo (565 MW), the Argentine Northeast-NEA (130 MW), Centro (118 MW), and Comahue (10 MW).
- ✓ There are no CSP power plants in Argentina, only a few research projects in small prototype designs.





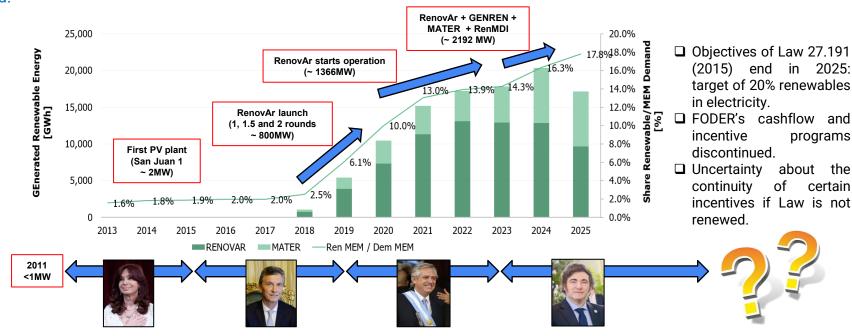


Renewable Energy Policies

Law 26190 (Replaced by 27191): RENOVAR: National Promotion Regime for the Use of Renewable Energy Sources to Produce Electric Energy.

Resolution 281-E/2017: MATER: Renewable Energy Term Market Regime for Electric Power (Approbation)

Law 27.424: GENREN: Promotion Regime for Distributed Renewable Energy Generation Integrated into the Public Electric Grid.

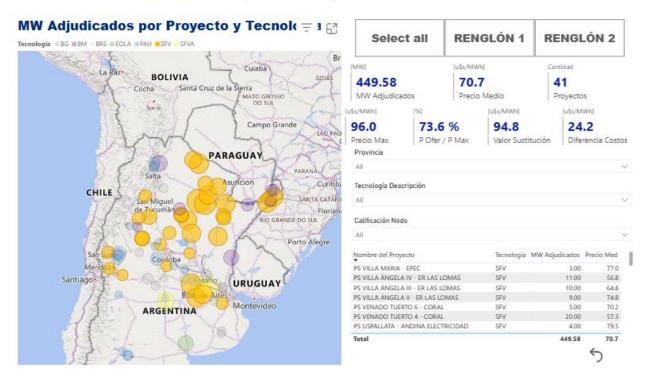




Renewable Energy Policies

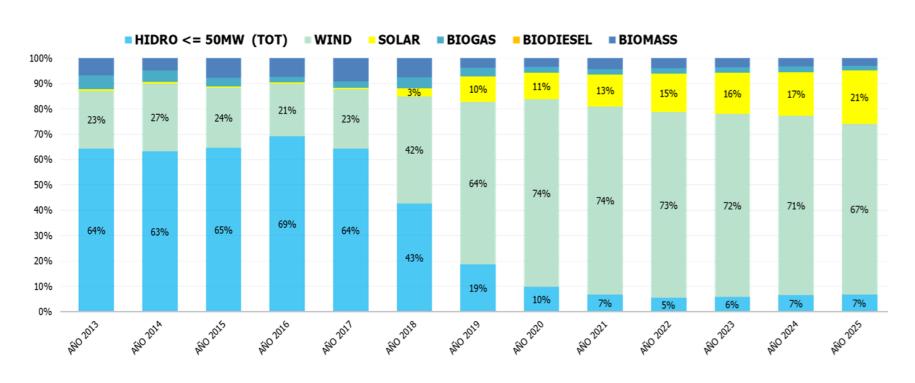
National and International Open Call "RenMDI" - Renewable Electric Power Supply Contracts with CAMMESA

(SE Resolution No. 36/2023 of January 31, 2023)



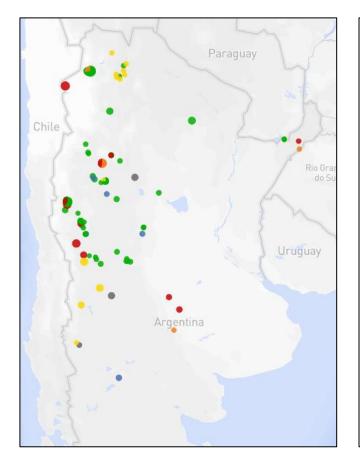


Renewable energy share – by source 2013 - September 2025





PV Projects distribution



Global Energy Monitor	
☑ • Operating	55
☑ ● Announced	16
☑ Oonstruction	n 12
☑ • Pre-Constru	iction 5
Mothballed	0
☑ • Shelved	5
	3
□ • Retired	0
Technology Type	
☑ Solar Thermal	. 0
☑ PV	93
☑ Assumed PV	3
MAXIMUM (MW)	410
MINIMUM (MW) 1	
select all clear all	



PV Projects distribution



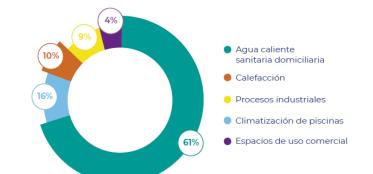


Solar thermal installed capacity Solar thermal census (2020)

















68 MW_{th} potencia instalada 68 GWh/a energía generada

7367 t_{oe}/a ahorro energético 23781 t_{co2e}/a reducción de emisiones

potencia instalada energia generada ahorro energético reducción de emisiones



Challenges and opportunities

- ➤ Regulatory Uncertainty: The expiration in 2025 of Law 27.191's fiscal incentives creates concern among investors and financiers, potentially raising project risk premiums.
- Transmission Constraints: The rapid addition of renewable capacity challenges the grid's ability to integrate new MWs, requiring investment in transmission and energy storage to manage peak-hour curtailment.
- Financing Challenges: Macroeconomic volatility and limited access to foreign currency or credit complicate equipment imports and project debt structuring a long-standing issue in large-scale infrastructure.
- ➤ MATER Market (Corporate PPAs): Enables project financing through direct corporate power purchase agreements, reducing dependency on government-backed regimes.
- > RIGI Framework: If extended to renewables, it could unlock large-scale capital inflows for qualified "strategic projects"
- ➤ Local Value Chains: Emerging initiatives in solar panel manufacturing (San Juan) and solar thermal technology (PRODIST) foster industrial development and local job creation.

Argentina faces structural difficulties but also has immense potential in renewable resources and human capital. The energy transition requires policy continuity, regional integration and international cooperation.







Thanks!
¡Muito obrigado!
¡Muchas gracias!





