

REVOLUSOLAR WORKING FOR COMMUNITY ENERGY THROUGH A COOPERATIVE APPROACH IN BRAZIL

April 2026

[Revolusolar](#), an organization operating in Brazil that brings solar energy to families in Rio de Janeiro's favelas and the Amazon through a cooperative approach, is mentioned as one example of successful community-led energy projects in the article [Bottom-up energy transitions: Managing the rise of energy communities in Latin America](#) published in 2024 by the International Energy Agency IEA.

[The Revolusolar website presents the history of the project.](#) Revolusolar was born in the Babilônia favela in Rio de Janeiro in 2015, out of the collective desire to build sustainable energy solutions from within the community itself.

The initiative grew alongside the community and soon reached the neighboring favela of Chapéu Mangueira. The first installations were carried out in local businesses, and by 2018, trained residents began working as solar energy installers, bringing this technology to community spaces such as the Tia Percília School. The work was strengthened with the creation of the *Percília and Lúcio Renewable Energy Cooperative*, the first solar energy cooperative in a Brazilian favela, solidifying Babilônia's and Chapéu Mangueira's status as pioneering territories for community-based solar energy in the country. With solar panels installed at strategic points throughout the community, such as the sports field, the Residents' Association, and public schools, the cooperative began supplying clean and affordable energy to dozens of local families. In 2023, new panels were installed, expanding the number of beneficiaries. This project is a milestone for Rio de Janeiro and an inspiring model for promoting energy justice in the favelas and peripheries throughout the country.

[According to the article published in 2023 by the IEA Agency](#) the programme originated as a strategy to combine poverty eradication efforts in the favelas of the city with the promotion of solar energy as a more affordable, sustainable and community-based development solution. Since 2012, the Brazilian government has allowed decentralised models for energy generation and, since October 2015, has also started to allow the cooperative model for distributed and grid-connected energy. These measures have bolstered investment in small-scale solar generation in the country. The first solar cooperative of Revolusolar was effectively created in 2021. The organisation is financed through institutional investors and rents from the solar beneficiaries. [Revolusolar realizes different programmes](#) carried out by a team of 15 contractors and 50 volunteers.



Founded in 2021, the cooperative has achieved the following impact results: the distributed generation system has already produced 85,3 kWh, enough to supply 60 families and avoid the emission of 5 tons of CO₂ into the atmosphere. Additionally, the community's electricity bill savings, amounting to R\$90,000 annually, allow this amount to be allocated to a community fund, which is used to pay those involved in installing the panels, electricians, teachers, among others.

Revolusolar has created in Rio de Janeiro the first community solar cooperative in a Brazilian favela, installing over 200 panels as of 2024. It has successfully reduced electricity bills for beneficiaries, trained residents (including women) in solar installation, and provided sustainable, cleaner energy while improving local infrastructure and fostering environmental education. Key results and impacts from Revolusolar's work in Babilônia include:

- *Reduced Energy Costs:* Residents and local businesses have reported significant savings on electricity bills;
- *Job Creation & Technical Training:* The project trained local residents to install and maintain solar systems, building a local workforce and employing them in the community.
- *Expanded Access & Sustainability:* By 2023–2024, the project expanded to benefit over 60 families, two schools, and several local businesses. It also powers community spaces like the sports court and Residents' Association.
- *Environmental Education:* Over 400 children and teenagers participated in workshops on sustainability, including topics such as solar energy, water, and waste.
- *Resilience & Reliability:* The systems provide a more stable power supply, protecting residents from frequent power outages and voltage issues common in the area.

Revolusolar is now working to replicate this model in other favelas and regions across Brazil.

To know more

[Revolusolar.org.br website](https://www.revolusolar.org.br)

[Revolusolar projects](#)

[Revolusolar in Facebook.com](#)

[Revolusolar News](#)

[Article in iea.org website](#)

[Article Brazil's RevoluSolar project in iea.org](#)

[International Energy Agency website](#)

[Revolusolar in globalyouth.coop](#)

[Article in pv-magazine-brasil.com](#)

[Comunidades solares en pv-magazine-brasil.com](#)

[Article in Longi.com](#)

[Revolusolar in noticiaszmbientales.com](#)

[Article in dgrv.coop](#)



[Article in plataformatransicionenergetica.org](https://plataformatransicionenergetica.org)

[Revolusolar in climaesociedade.org](https://climaesociedade.org)

[Article in elpais.com](https://elpais.com)

