

Innovation in Renewable Energy:

Driving the Future of Solar Glass in Brazil

Presentation - 2025

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Brazil Holds The Key To Latin America's Solar Potential

Latin America is on the cusp of a critical developmental phase for its solar power generation sector that could see it leapfrog Southern Asia and North America to become the world's second largest hub for solar generation behind eastern Asia.

The region has 176,172 megawatts (MW) of solar capacity in preconstruction as of the end of 2023, according to Global Energy Monitor (GEM).

Homerun is set to play a critical role in Brazil's energy transition.



The Importance of Renewable Energy

Reducing dependence on fossil fuels.

Tackling climate change and reducing carbon emissions.

Encouraging environmental sustainability.



Homerun's Role in Renewable Energy in Brazil

Homerun Announces Latin America's First Dedicated 1000 tpd Solar Glass Manufacturing Facility within its Silica to Solar Vertically Integrated Strategy in Brazil

KEY POINTS:

- 1,000 tonne per day capabilities / 365,000 tonnes per year gross capacity.
- To be built in Belmonte, Brazil proximal to Homerun's silica resources.
- China competitive materials and logistical advantage from nearby Homerun silica.
- Government imposed additional 25% tariffs on solar components imported from China.
- Government created tax incentives for companies producing and buying domestic supply.
- Competitive COGS advantage over China (currently 99% of Brazil Solar Glass).
- Based on current ongoing discussions offtake is expected to grow to 450 thousand tonnes exceeding the modeled 1000 tpd plant capacity.

COMPLETED:

- Hiring of 2 specialized consultants for construction, permitting and feasibility study.
- 3 LOI's signed for solar glass offtake for total of a minimum 300,000 tonne per year at USD\$750/t with Sengi Solar, Balfar Solar and Brasil Fotovoltaico.
- Budgetary offer <u>received</u> from Horn Glass AG
 CAPEX of EURO 151.5 million for Latin America's
 First Solar Glass Manufacturing Facility. Second competitive budgetary offer received from GS
 Engineering GmbH.
- 64.5 Hectare land granted directly beside resource and main highway.

IN PROCESS:

- Permitting for development
- Bankable feasibility study
- Financing and construction
- Pending success of the above,
 Homerun is targeting production in H2 2027.

Homerun's Plans Have Been Rewarded..

Donation of Land

The Municipality of Belmonte donated a 64.5 Hectare section of land for the development of Homerun's facilities.

Tax Incentives

Granting of tax incentives for optimization and operation of Homerun's facilities.

Expedited Licensing

Licensing, permitting and priority approval flow for processing and project documents.

Natural Gas Supply

Commitment of continuous and safe natural supply from Bahiagás.

Paving of Roads

Improvement and paving of local roads providing improved access to donated areas.

Benefits:

Training

Education

Jobs

Fundraising

Investments





Antimony Free Solar Glass

Doing it right from the start..

Homerun will produce antimony free glass from the beginning with equipment and furnace design already prepared with no additional CAPEX required. Antimony raises environmental and health concerns with EU and US regulations strongly pushing for antimony-free solar glass. Homerun believes export markets will soon require it.



Economic and Recycling Impact

Antimony improves refining, oxygen provision, and Iron redox balance leading to higher transmission and fewer defects. However, Homerun's silica sand as an input holds less than 20ppm of iron impurities allowing us to avoid use of antimony completely. Antimony prices have tripled in the past year (now USD \$20-30,000/t). For a 1,658 t/y consumption, this represents ~USD \$33M in OPEX, eliminating antimony significantly improves cost competitiveness and allows for recycling of solar glass.

Solar Glass Benefits & Opportunities

Core Advantage of Vertical Integration

Ownership of ultra-pure solar-glass ready silica with integrated logistics and proximity to Brazil's solar manufacturers will create a strategic advantage over imported solar glass.

Job Creation in Brazil

Developing a domestic solar glass manufacturing industry could create significant employment opportunities. Currently, the photovoltaic industry in Brazil generates around 1.2 million jobs

First-Mover Advantage

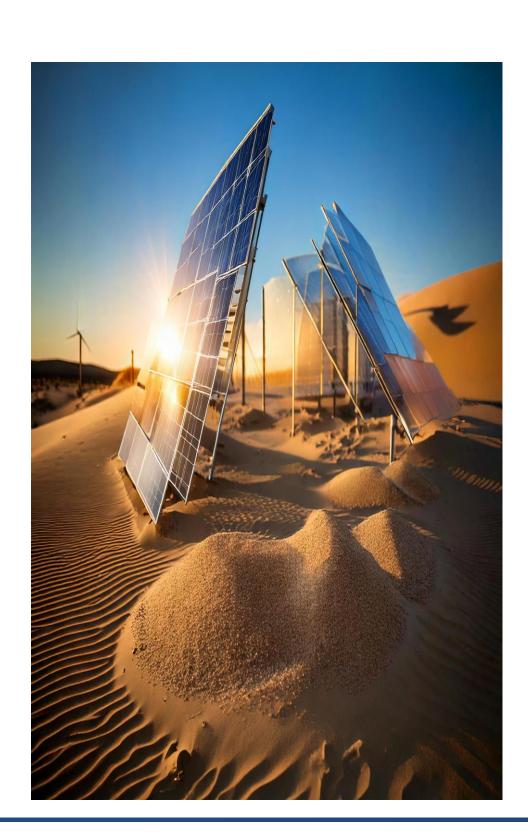
With the changing regulatory landscape, early entrants can establish a strong market position. The new focus on domestic production may lead to supportive policies and incentives for manufacturers.

Competitive Advantage & Growing Demand

The import tax on Chinese products may reduce competition from foreign manufacturers, creating space for domestic players. As the industry develops, there may be opportunities to export to other Latin American countries.

Homerun Has Been Selected.. ** BNDES





Joint Support Plan Received from BNDES and Finep

Homerun has received a joint support plan from a public call issues by BNDES and Finep, Brazil's innovation agency. BNDES stands as the second-largest development bank globally, trailing only China Development Bank, which holds approximately \$1.2 trillion in assets. With assets estimated at over BRL 820 billion (~US\$ 141 billion) as of 2025, BNDES dwarfs most other development finance institutions worldwide. This JSP identified a list of Products/Programs/Lines that may be utilized provided requirements of each instrument are duly met:

- **Long-Term Credit Lines**
- **Equity Investments**
- Non-Reimbursable Funds
- **Economic Subsidies**

* In addition to the facilities mentioned above, other long-term financing options are available. Homerun will now submit the financial support requests for final analysis by BNDES and FINEP.



Offtake Agreements Announced To Date:

Balfar Solar

- Minimum of 100,000 ton per year solar glass offtake from start of production at USD \$750/t
- Balfar is an established top-3 manufacturer of solar panels in Brazil.
- Initiated discussions of Joint Venture over Balfar's solar module business.

Sengi Solar

- Minimum of 20,000 ton per year solar glass offtake from start of production at USD \$750/t.
- Sengi is the largest solar module manufacturer in South America.

Brasil Fotovoltaico Ltd.

• Minimum non-binding offtake for up to 180,000 ton per year of solar glass offtake.

More to be announced

- Due to the 25% increased import taxes, many local solar module manufacturers are scrambling to bring manufacturing production in-house. Homerun is the only Corporation in Brazil moving solar glass production forward due to our high-quality raw materials and proximity to market.
- Homerun anticipates exceeding the modeled 1,000 tpd production capacity pre-construction, positioning Homerun as the go-to supplier for solar glass in Brazil.





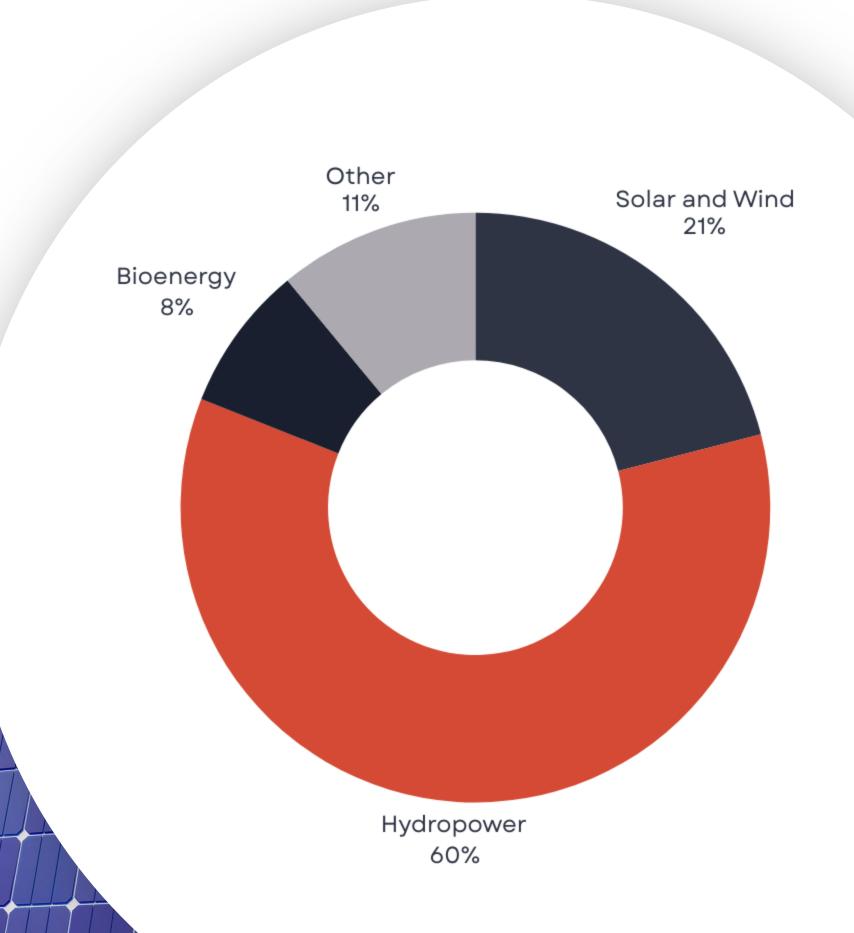
Brazil's Trend in Renewable Energy

Growth in Renewable Energy Use

Brazil has seen rapid growth in renewable energy use in recent years, with the country generating 93.1% of its electricity from renewable sources in 2023. Brazil's wind and solar generation increased by 4 percentage points to 21%, which is above the global average of 13%. Brazil's solar generation increased by 72% from 2022 to 2023, and from January to May 2024, solar generation was 68% higher than the same period in 2023.

Investment and Government Policy

Brazil's government scrapped import subsidies on assembled solar panels, and from March will revoke more than 300 temporary tax reductions on solar modules, mainly imported from China. The government has earmarked BRL 41.5 billion for the construction of 196 solar power plants.



Previous Challenges in Implementation

Cost Competitiveness

• Chinese solar panels were significantly cheaper than domestically produced alternatives, often up to 50% less expensive. This price difference made it difficult for Brazilian manufacturers to compete.

Tax Exemptions

• Until recently, imported solar equipment from China enjoyed tax exemptions, further widening the price gap between imported and domestically produced components.

Lack of Government Support

• Historically, there was insufficient government support and incentives for developing a domestic solar manufacturing industry. The focus was more on deploying solar energy rather than producing the components locally.

Technological Gap

• Brazil lacked the necessary technological expertise and infrastructure to compete with established Chinese manufacturers



Future Opportunities in a Changing Landscape

Reintroduction of Import Taxes - Gov't Support

The Brazilian government now recognizes the strategic importance of domestic solar equipment production for energy security and the transition to a low-carbon economy. Starting January 2024, Brazil is reintroducing a 25% import tax on Chinese solar panels. This move aims to level the playing field for domestic manufacturers. Brazil's solar energy market is expanding rapidly, with a projected CAGR of 23.30% from 2023 to 2028. This growth creates a substantial domestic demand for solar components.

Growing Market

Brazil's solar energy market is expanding rapidly, with a projected CAGR of 23.30% from 2023 to 2028. This growth creates a substantial domestic demand for solar components. With 113,147 MW of solar capacity in the pre-construction phase alone, Brazil ranks second only to China (241,744 MW) in the solar pre-construction tally globally.



R&D Producing Innovations in Solar Technology



High Efficiency Solar Panels / Perovskites

Perovskite technology is emerging as a promising advancement in solar energy, offering several advantages over traditional silicon-based solar cells. Perovskite solar cells have rapidly increased in efficiency, reaching over 25% in recent years. Some tandem configurations have even achieved efficiencies exceeding 28%



Building-Integrated Photovoltaics

BIPV systems serve as both building materials and power generators, replacing conventional building elements while producing clean electricity. BIPV generates clean electricity on-site, reducing reliance on external power sources and enhancing energy independence









Solar Energy Storage

Solar energy storage, particularly battery storage, allows excess energy generated during peak sunlight hours to be stored for use when sunlight is unavailable or insufficient. This helps bridge the gap between supply and demand, ensuring a steady and reliable power supply regardless of solar conditions.

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