ABSOLAR
Brazilian Solar Photovoltaic Energy Association

Solar Photovoltaic Energy in Brazil
ABSOLAR's Infographic

Updated on October 1st, 2021 | n. 36

Solar PV Energy Benefits to Brazil

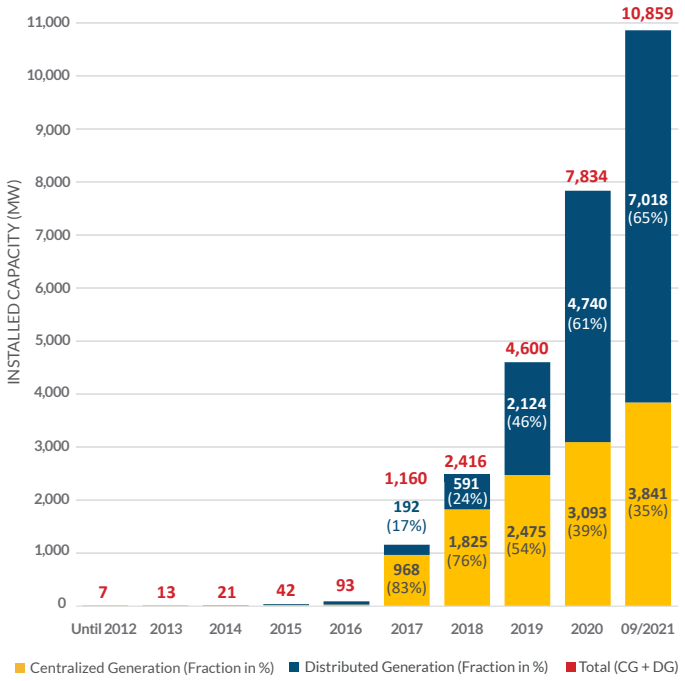
Source: ABSOLAR, 2021.

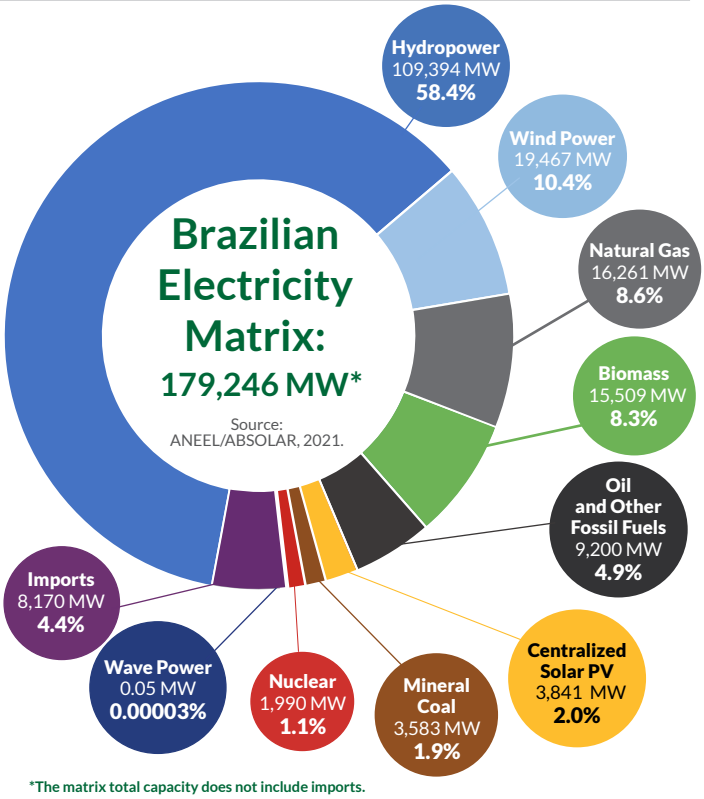
- **Over 10.8 GW** in operation.
- Over **R$ 56.4 billion** in new investments.
- Over **325 thousand new jobs** created in the country.
- Over **R$ 15.1 billion** in taxes collected.
- Over **12.4 million tons** of CO_2 avoided.

Data accumulated since 2012.

Evolution of the Solar Photovoltaic Energy in Brazil

Source: ANEEL/ABSOLAR, 2021.





*The matrix total capacity does not include imports.

Distributed Generation

State Ranking

Source: ANEEL/ABSOLAR, 2021.

	Installed Capacity (MW)	(%)
Minas Gerais	1303.7	18.7%
São Paulo	888.1	12.7%
Rio Grande do Sul	848.7	12.1%
Mato Grosso	533.7	7.6%
Paraná	382.9	5.5%
Goiás	368.3	5.3%
Rio de Janeiro	294.2	4.2%
Bahia	253.5	3.6%
Santa Catarina	247.9	3.5%
Ceará	239.3	3.4%
Mato Grosso do Sul	221.1	3.2%
Pernambuco	193.7	2.7%
Pará	163.1	2.3%
Rio Grande do Norte	147.1	2.1%
Piauí	142.7	2.0%
Maranhão	139.3	2.0%
Paraíba	127.5	1.8%
Espírito Santo	123.6	1.7%
Tocantins	78.1	1.1%
Distrito Federal	75.8	1.1%
Rondônia	72.5	1.0%
Alagoas	57.2	0.8%
Sergipe	42.2	0.6%
Amazonas	39.5	0.5%
Acre	14.3	0.2%
Amapá	10.7	0.2%
Roraima	9.6	0.1%

Municipality Ranking

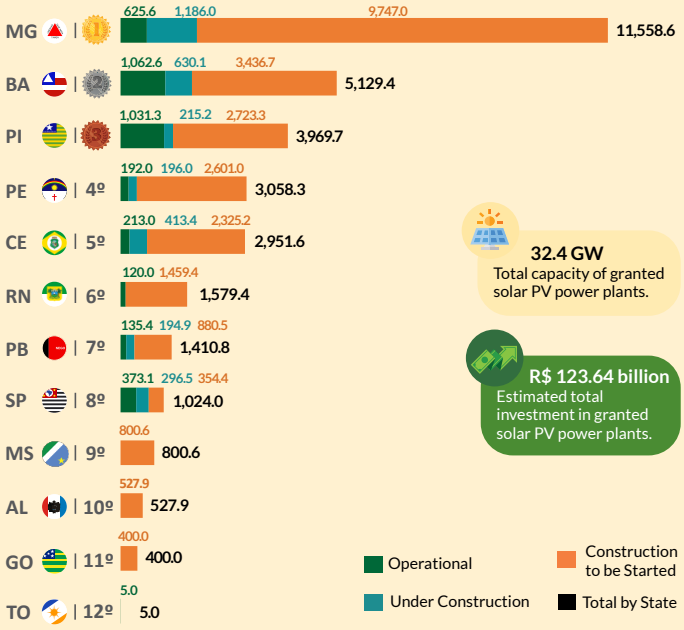
Source: ANEEL/ABSOLAR, 2021.

	Installed Capacity (MW)	(%)
Cuiabá – MT	89.1	1.3%
Brasília – DF	75.4	1.1%
Uberlândia – MG	70.1	1.0%
Teresina – PI	69.0	1.0%
Rio de Janeiro – RJ	61.7	0.9%
Fortaleza – CE	59.1	0.8%
Goiânia – GO	56.4	0.8%
Campo Grande – MS	46.5	0.7%
Belo Horizonte – MG	39.8	0.6%
Manaus – AM	37.8	0.5%

Centralized Generation

Source: ANEEL/ABSOLAR, 2021.

Installed capacity (MW) and status of granted solar PV power plants of the regulated market and of the free market per state:

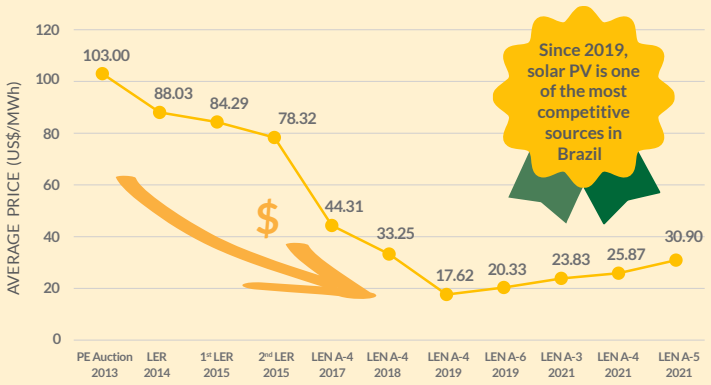


32.4 GW
Total capacity of granted solar PV power plants.

R$ 123.64 billion
Estimated total investment in granted solar PV power plants.

Price Development of Solar PV Energy in the Energy Auctions of the Regulated Electricity Market

Source: CCEE/ABSOLAR, 2021.



Updated 10/01/2021

Electricity Generation Records

Source: ONS/MME, 2021.

Solar PV achieved new records of electricity generation on the SIN (National Grid System) in Brazil:

DAILY AVERAGE
Aug. 2nd, 2021
893.87
MWaverage
with a capacity factor of
27.50%

DAILY MAXIMUM
Aug. 26th, 2021
2,592.15 MW
at 12 a.m.
with instantaneous capacity factor of
79.76%

1.6%
of the electricity supplied in Brazil was generated from solar PV energy in September 2021.

Distributed Generation

Source: ANEEL/ABSOLAR, 2021.

Distributed microgeneration (up to 75 kW) and minigeneration (above 75 kW up to 5 MW) solar PV systems installed at homes, commercial buildings, industries, rural properties and public buildings.

97.4%
is the share of solar PV installed capacity in distributed microgeneration and minigeneration, leading the segment by far.

99.9%
of all distributed micro and minigeneration connections are from solar PV systems.

611,502
Solar PV systems connected to the grid.

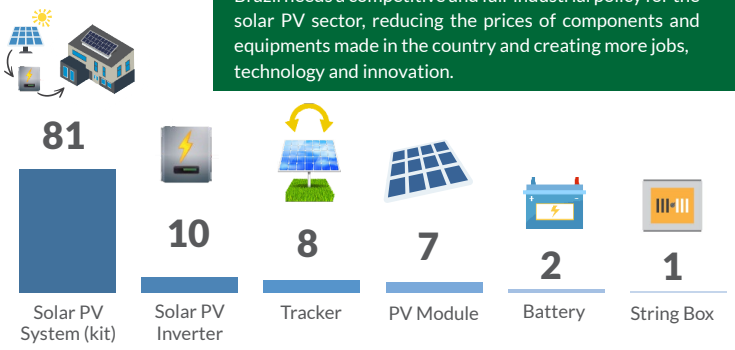
765,624
consumer units
(0.9% from the total)
receiving electricity credits through net-metering.

Value Chain

Source: BNDES, 2021.

Number of national manufacturers from the solar PV sector registered at the BNDES FINAME financing program:

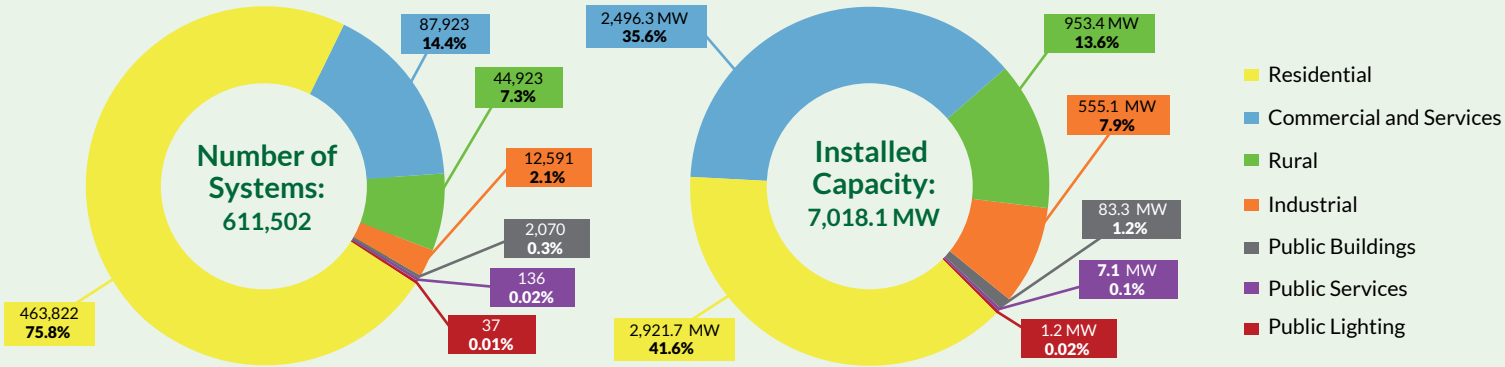
Brazil needs a competitive and fair industrial policy for the solar PV sector, reducing the prices of components and equipments made in the country and creating more jobs, technology and innovation.



Data updated in accordance with the new BNDES re-accreditation procedure with the FINAME.

Solar PV Distributed Generation by Consumer Type in Brazil

Source: ANEEL/ABSOLAR, 2021.



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