ABSOLAR
Brazilian Solar Photovoltaic Energy Association

Solar Photovoltaic Energy in Brazil
ABSOLAR's Infographic

Updated on June 3rd, 2022 | n. 44

Solar PV Energy Benefits to Brazil

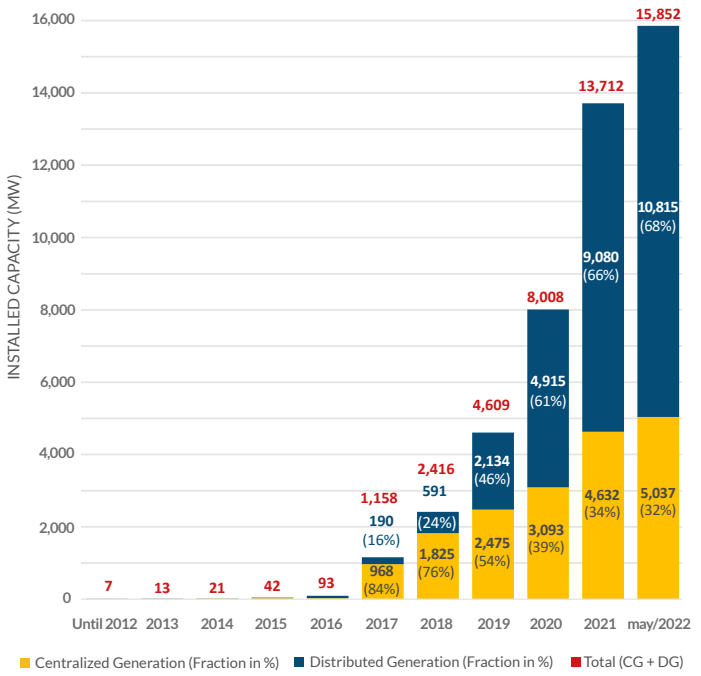
Source: ABSOLAR, 2022.

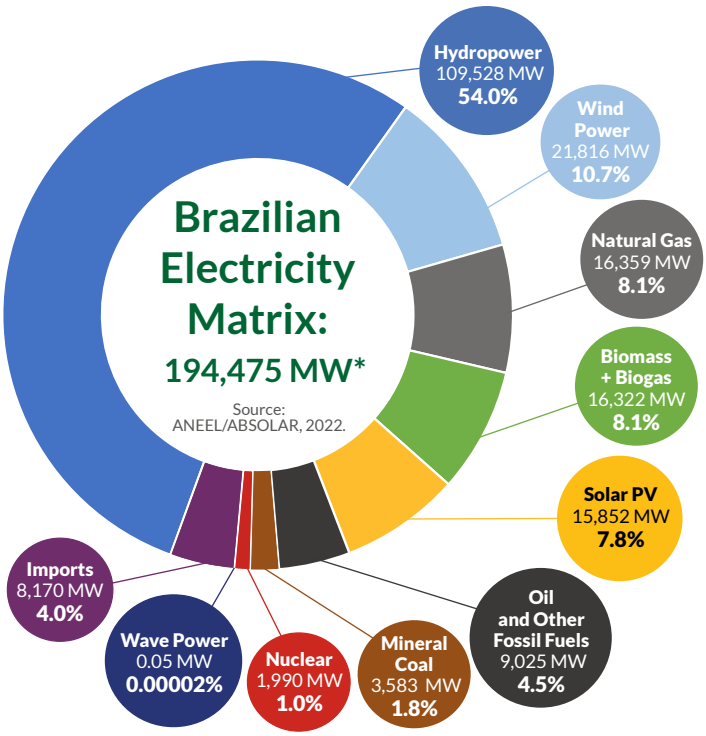
- Over **15.8 GW** in operation.
- Over **R$ 85.4 billion** in new investments.
- Over **475.5 thousand new jobs** created.
- Over **R$ 22.7 billion** in taxes collected.
- Over **23.6 million tons** of CO_2 avoided.

Data accumulated since 2012.

Evolution of the Solar Photovoltaic Energy in Brazil

Source: ANEEL/ABSOLAR, 2022.





* The matrix total capacity does not include imports. In addition, mini and micro distributed generation are considered in the values of installed capacity for each source, according to criteria applied by MME.

Distributed Generation

State Ranking

Source: ANEEL/ABSOLAR, 2022.

		Installed Capacity (MW)	(%)
Minas Gerais	1st	1,787.6	16.7%
São Paulo	2nd	1,422.2	13.2%
Rio Grande do Sul	3rd	1,249.1	11.6%
Mato Grosso	4th	716.0	6.6%
Paraná	5th	522.1	4.8%
Santa Catarina	6th	521.9	4.8%
Goiás	7th	509.7	4.7%
Rio de Janeiro	8th	435.1	4.1%
Bahia	9th	411.0	3.8%
Ceará	10th	398.4	3.5%
Mato Grosso do Sul	11th	358.4	3.3%
Pernambuco	12th	345.0	3.2%
Pará	13th	322.1	3.0%
Maranhão	14th	274.0	2.5%
Rio Grande do Norte	15th	244.4	2.3%
Piauí	16th	225.6	2.1%
Espírito Santo	17th	206.0	1.9%
Paraíba	18th	188.4	1.7%
Tocantins	19th	156.7	1.4%
Rondônia	20th	114.6	1.1%
Distrito Federal	21st	112.0	1.0%
Alagoas	22nd	102.2	0.9%
Sergipe	23rd	64.2	0.6%
Amazonas	24th	64.1	0.6%
Acre	25th	31.5	0.3%
Amapá	26th	16.5	0.1%
Roraima	27th	16.0	0.1%

Municipality Ranking

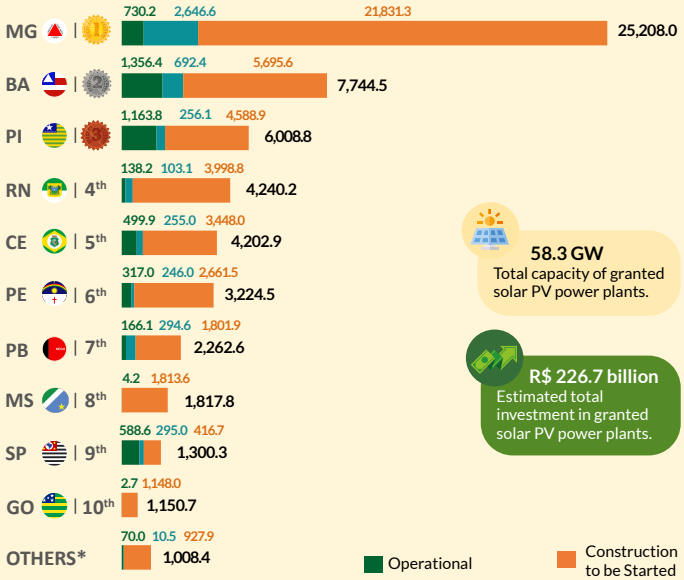
Source: ANEEL/ABSOLAR, 2022.

		Installed Capacity (MW)	(%)
Cuiabá - MT	1st	120.8	1.1%
Teresina - PI	2nd	112.2	1.0%
Brasília - DF	3rd	112.0	1.0%
Rio de Janeiro - RJ	4th	95.5	0.9%
Fortaleza - CE	5th	95.1	0.9%
Uberlândia - MG	6th	88.0	0.8%
Campo Grande - MS	7th	83.6	0.8%
Goiânia - GO	8th	82.6	0.8%
Manaus - AM	9th	58.5	0.5%
Palmas - TO	10th	56.5	0.5%

Centralized Generation

Source: ANEEL/ABSOLAR, 2022.

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



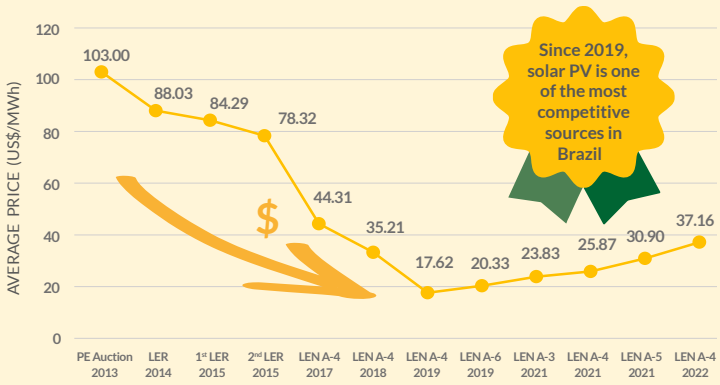
*Power Plants located in 15 brazilian states

58.3 GW
Total capacity of granted solar PV power plants.

R$ 226.7 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, 2022.



Updated 06/03/2022

Electricity Generation Records

Source: ONS/MME, 2022.

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

DAILY AVERAGE
Feb. 23rd, 2022
1,398
MWaverage
meeting
1.8%
of the demand for electricity in Brazil

DAILY MAXIMUM
Mar. 30th, 2022
3,787 MW
at 11:00 a.m.
equivalent to
4.8%
of the national demand at that moment

1.7%
of the electricity supplied in Brazil was generated from solar PV energy in May 2022.

Distributed Generation

Source: ANEEL/ABSOLAR, 2022.

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.

98.1%
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.

1,017,642
Solar PV systems connected to the grid.

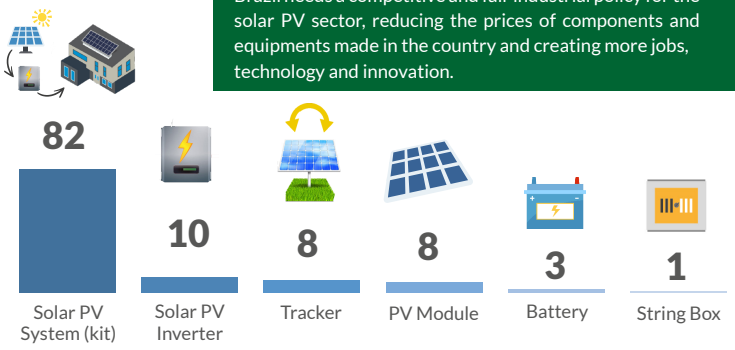
1,284,200
consumer units
(1.4% from the total)
receiving electricity credits through net-metering.

Value Chain

Source: BNDES, 2022.

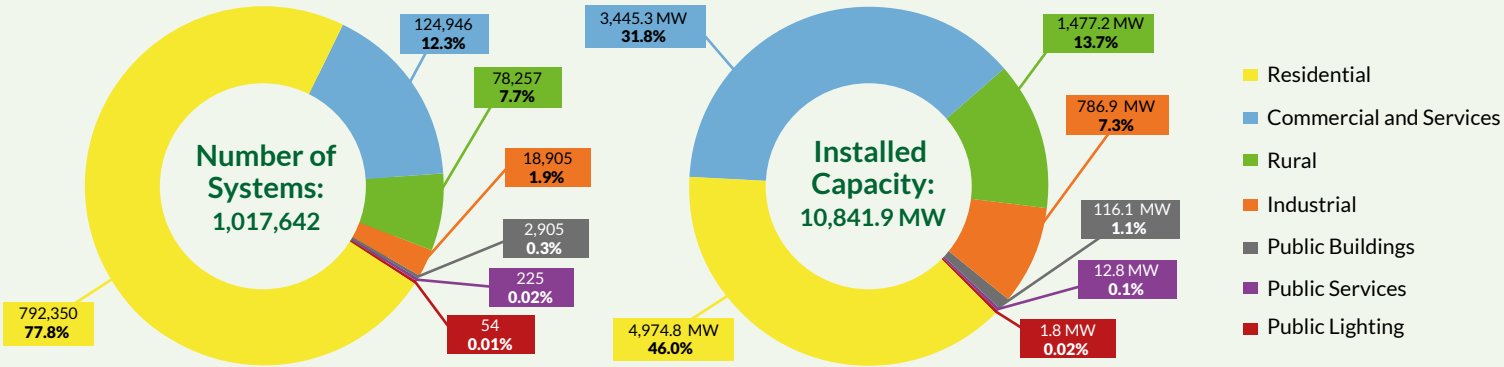
Number of national manufacturers from the solar PV sector registered at the BNDES FINAME financing program:

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.



Solar PV Distributed Generation by Consumer Type in Brazil

Source: ANEEL/ABSOLAR, 2022.



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