

Updated on May 2<sup>nd</sup>, 2022 | n. 43

# **Solar Photovoltaic Energy in Brazil** ABSOLAR's Infographic

## Solar PV Energy Benefits to Brazil



Over **15.3 GW** in operation.



Over R\$ 82.1 billion in new investments.



Over 459 thousand new jobs created in the country.



Over **R\$ 22.1** billion in taxes collected.

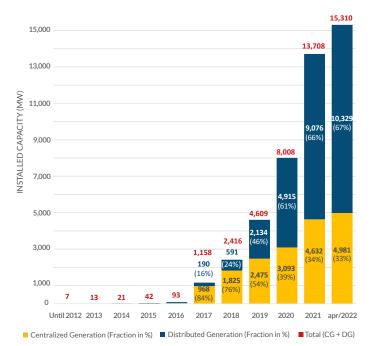


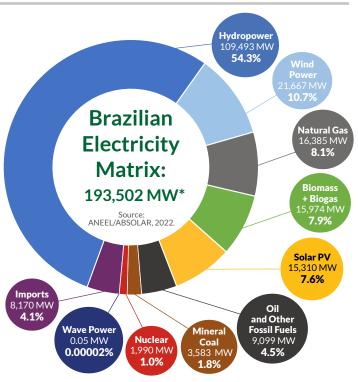
Over **22.0** million tons of CO<sub>2</sub> avoided.

Data accumulated since 2012.

# **Evolution of the Solar Photovoltaic Energy in Brazil**

Source: ANEEL/ABSOLAR, 2022.



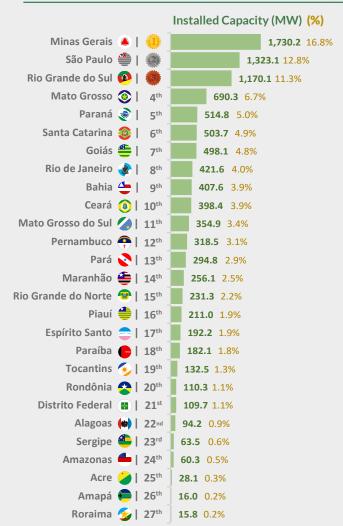


 $^{st}$  The matrix total capacity does not include imports. In addition, mini and micro distributed generation are considered in the values of installed capacity for each source, according to criteria applied by MME

### **Distributed Generation**

#### **State Ranking**

Source: ANEEL/ABSOLAR, 2022.



### **Municipality Ranking**

Source: ANEEL/ABSOLAR, 2022.



#### 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:



### 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.



#### 98.0%

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



963,935 Solar PV systems connected to the grid.



#### 99.9%

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

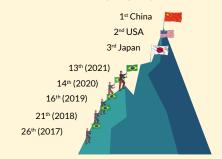


1,216,777 consumer units

(1.3% from the total) receiving electricity credits through net-metering.

### **Evolution of Brazil in the World Ranking**

Source: IEA PVPS, 2018, 2019, 2020 e 2021. IRENA, 2022. ABSOLAR, 2022.



#### Solar PV Leaders in 2021

Source: IRENA, 2022, Adapted by ABSOLAR, Added capacity: Accumulated installed capacity: 1st China 52.9 GW 1st China 306.4 GW 2<sup>nd</sup> USA 19.9 GW 2<sup>nd</sup> USA 93.7 GW 3rd India 10.3 GW 3rd Japan 74.1 GW 4th Brazil 5.7 GW 4th Germany 58.4 GW 5th Germany 4.7 GW 5th India 49.4 GW 6<sup>th</sup> Japan 4.4 GW 6th Italy 22.6 GW 7th South Korea 3.5 GW 7th Australia 19.0 GW 8th Netherlands 3.2 GW 8th South Korea 18.1 GW 9<sup>th</sup> Spain 3.1 GW 9th Vietnam 16.6 GW 10th France 2.6 GW 10th France 14.7 GW \* Updates in the ANEEL database point to an increase of the cumulative solar PV installed 13th Brazil\* 13.6 GW

#### Value Chain

capacity until the end of last year

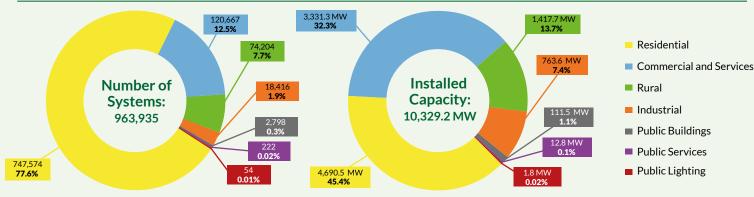
Source: BNDES, 2022.

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



# Solar PV Distributed Generation by Consumer Type in Brazil

Source: ANEEL/ABSOLAR, 2022.









System (kit)

Inverter