



Updated on December 14<sup>th</sup>, 2020 | n° 26

### Solar PV Energy Benefits to Brazil

Source: ABSOLAR, 2020.



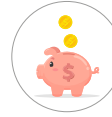
Over **7.2 GW** in operation since 2012.



Over **R\$ 36.5 billion** in new investments.



Over **219 thousand new jobs** created in the country.



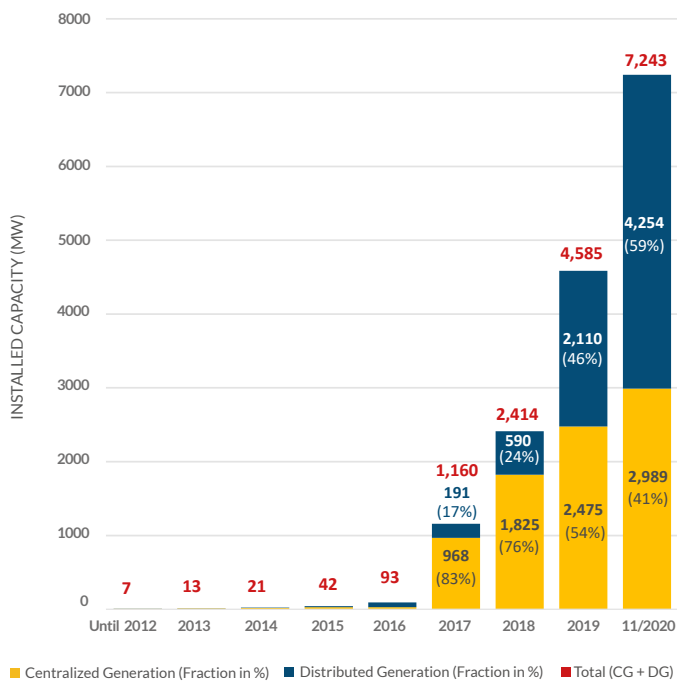
Over **R\$ 10.8 billion** in taxes collected.



Over **1.1 million tons** of CO<sub>2</sub> avoided.

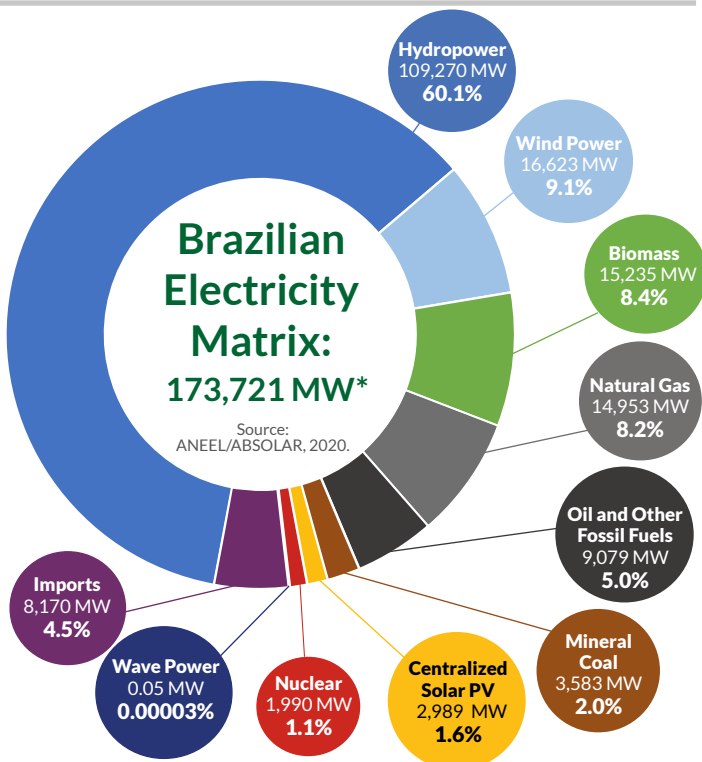
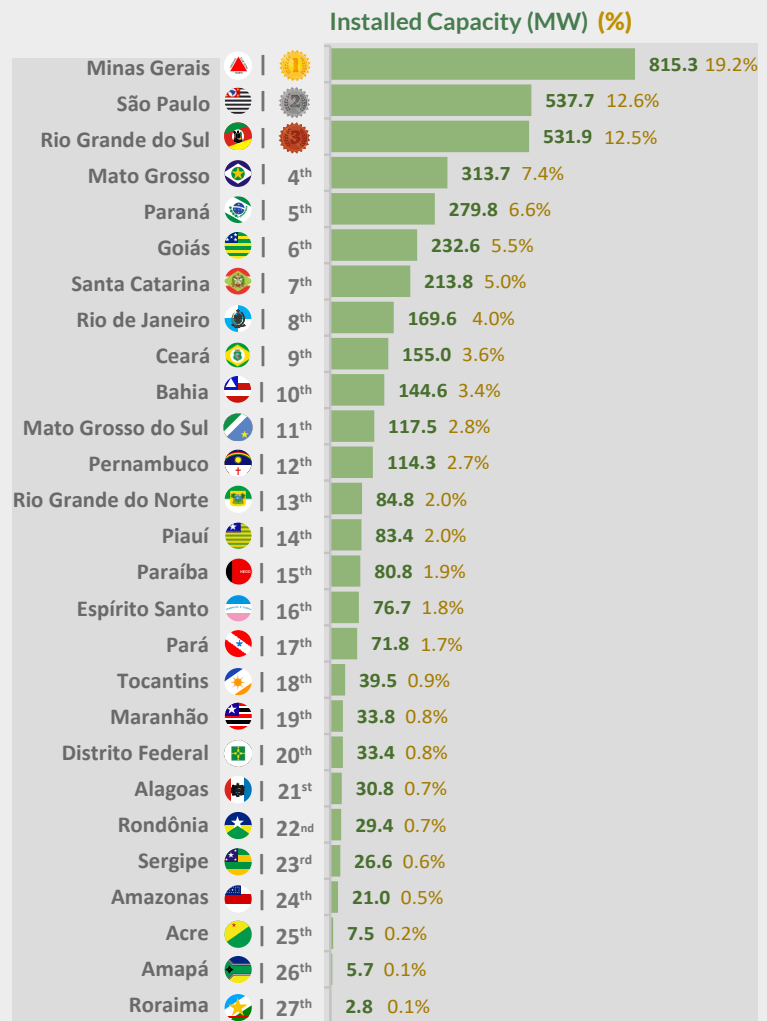
### Evolution of the Solar Photovoltaic Energy in Brazil

Source: ANEEL/ABSOLAR, 2020.



### Distributed Generation State Ranking

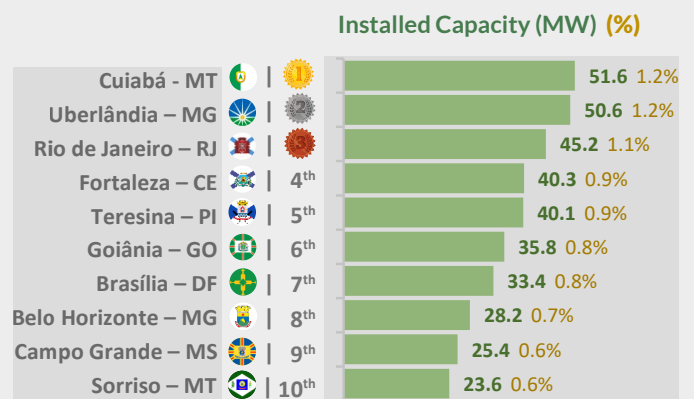
Source: ANEEL/ABSOLAR, 2020.



\*The matrix total capacity does not include imports.

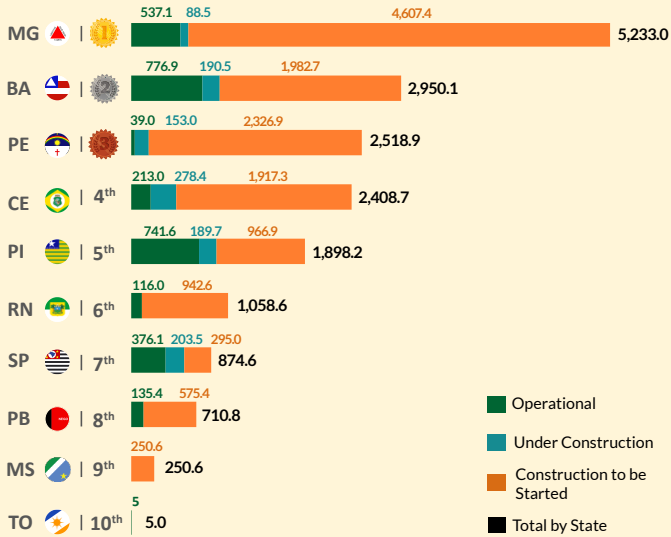
### Municipality Ranking

Source: ANEEL/ABSOLAR, 2020.

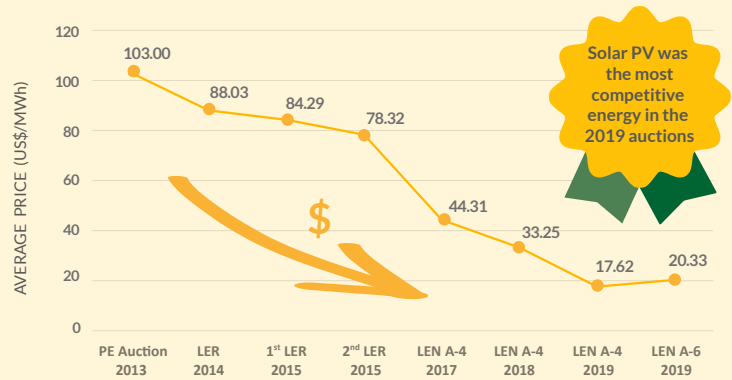


## Centralized Generation Source: ANEEL/ABSOLAR, 2020.

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



## Price Development of Solar PV Energy in the Energy Auctions of the Regulated Electricity Market Source: CCEE/ABSOLAR, 2019.



## Electricity Generation Records Source: ONS/MME, 2020.

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

**DAILY AVERAGE**  
Sep. 06<sup>th</sup>, 2020  
**774.9 MW**  
average  
with a capacity  
factor of  
**26.8%**

**DAILY MAXIMUM**  
Apr. 03<sup>rd</sup>, 2020  
**2,073.1 MW**  
at 10 a.m.  
with instantaneous  
capacity factor of  
**76.0%**

**1.4%**  
of the electricity  
supplied in Brazil was  
generated from  
solar PV energy in  
September 2020.

## Distributed Generation Source: ANEEL/ABSOLAR, 2020.

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.

**97.0%**  
is the share of solar PV  
installed capacity in distributed  
microgeneration and  
minigeneration, leading the  
segment by far.

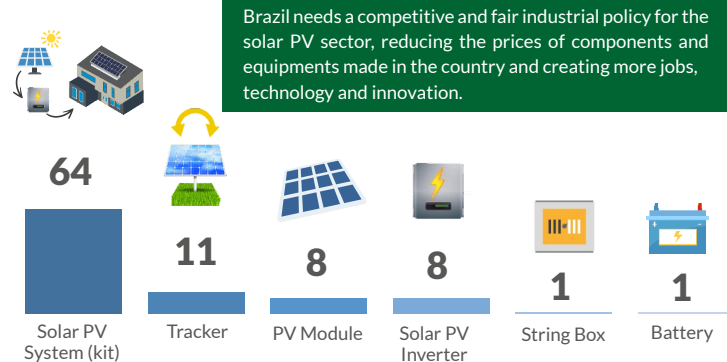
**99.9%**  
of all distributed micro and  
minigeneration connections  
are from solar PV systems.

**353,052**  
Solar PV  
systems connected  
to the grid.

**449,041**  
consumer units  
(0.5% from the total)  
receiving electricity credits  
through net-metering.

## Value Chain Source: BNDES, 2020.

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



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

## The Global Solar PV Market

Which countries invested the most in solar PV energy in 2019?

Annual Installed Capacity:

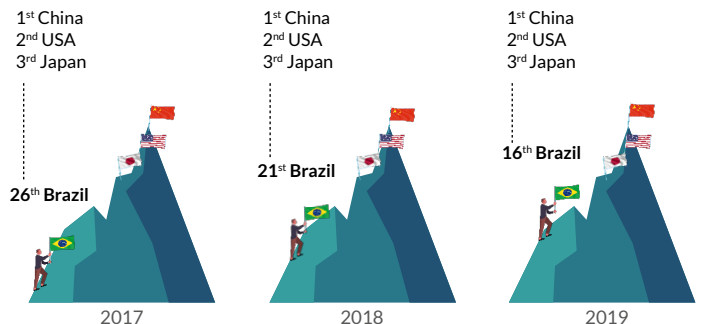
1 <sup>st</sup> China	30.1 GW
(2) European Union	16.0 GW
2 <sup>nd</sup> USA	13.3 GW
3 <sup>rd</sup> India	9.9 GW
4 <sup>th</sup> Japan	7.0 GW
5 <sup>th</sup> Vietnam	4.8 GW
12 <sup>th</sup> Brazil	2.1 GW

Cumulative Installed Capacity:

1 <sup>st</sup> China	204.7 GW
(2) European Union	137.7 GW
2 <sup>nd</sup> USA	75.9 GW
3 <sup>rd</sup> Japan	63.0 GW
4 <sup>th</sup> Germany	49.2 GW
5 <sup>th</sup> India	42.8 GW
16 <sup>th</sup> Brazil	4.5 GW

Source: ABSOLAR, 2020. | IEA PVPS, 2020. | IRENA, 2020.

## Brazil's Evolution in the World Ranking



Source: ABSOLAR, 2020. | IEA PVPS, 2018-2020. | IRENA, 2020.