INFOWIND·20

May 10 - 2021

Industry size in Brazil

18.62GW
of installed capacity

713
Wind Farms

8.469
Turbines in operation

12
States

How many energy do they generate?

57.0TWh
of wind energy were generated in 2019

10.0%
of all the generation injected into the National Interconnected System in the period.

1.9%
growth over the previous year.

What represents this generation?

28.8Million
of households per month can be supplied

86.4Million
of benefited inhabitants

Brazil will have about **29.1GW** of wind power installed capacity until 2024*

*Considering auctions already carried out and contracts signed in the free market

Contributions to wind energy in Brazil

US$35.8Billion
Of investments from 2011 to 2020.

for each **MW** installed

15 jobs are created.

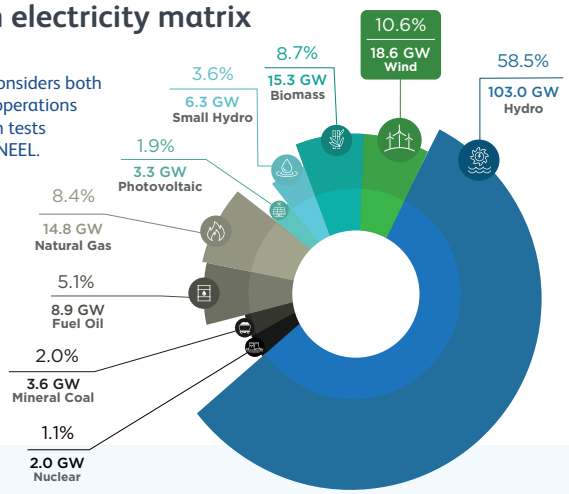
21.2Million
tons of CO_2 avoided in 2019

equivalent to the emission of about **20.9 million cars.**

Source: Bloomberg New Energy Finance - BNEF / MCTIC / ABEEólica

Brazilian electricity matrix in GW

**This matrix considers both wind farms in operations and the ones in tests approved by ANEEL.



Soruce: ANEEL / ABEEólica

Benefits of Wind Energy

- **Generates income and improves life** for landowners with lease for placement of towers
- It is renewable, it does not pollute, it contributes for Brazil to fulfill its objectives in the Climate Agreement
- Wind parks **do not emit CO_2**
- Enables land-owners to continue **planting or growing their animals**
- One of the best cost-effective energy tariffs
- **Provides training and qualifications** for local labor

The installation of wind farms contributes to increase in the Gross Domestic Product (GDP) and the Municipal Human Development Index (MHDI), as identified by a study by GO Associados.

Through a comparison between a group of municipalities that have wind farms and another that does not, it was possible to conclude that in the municipalities where there are wind farms: to identify that in the municipalities that received their installation:

- real GDP increased by **21.15%** (period 1999 to 2017)
- the MHDI grew about **20%** (2000 to 2010 period)

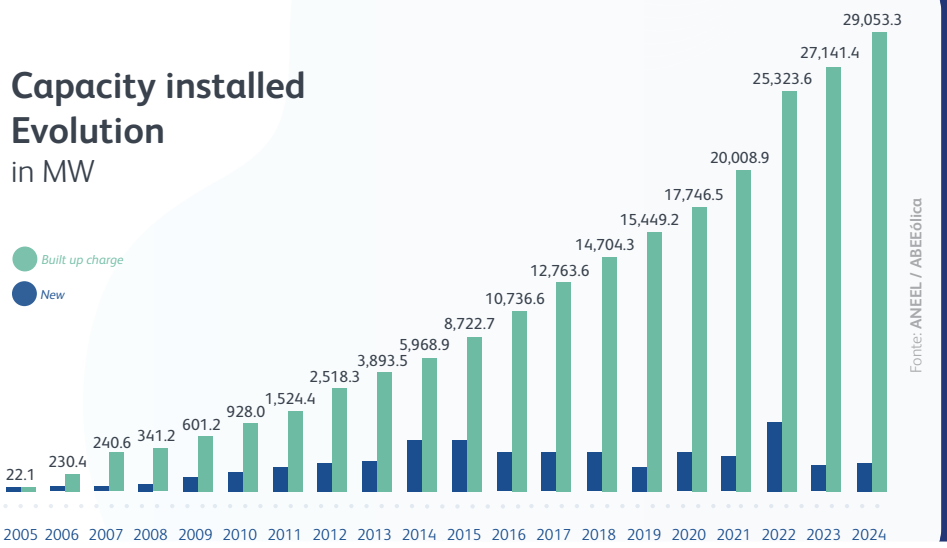
Wind energy occupies little land, allowing the continuation of the creation of animals or plantations. Considering the space chosen for a wind farm, the turbines occupy about **8% of the area, and can reach about 6%**.

Capacity installed and Number of Wind Farms
by State

NE S N SE SIN

State	Installed Capacity (MW)	Wind farms	Wind turbines
RN	5,266.2	183	2,366
BA	5,094.7	196	2,223
CE	2,385.1	92	1,115
PI	2,354.7	81	1,007
RS	1,835.9	80	830
PE	798.4	34	417
MA	426.0	15	172
SC	238.5	14	173
PB	157.2	15	121
SE	34.5	1	23
RJ	28.1	1	17
PR	2.5	1	5
TT	18,621.7	713	8,469

Capacity installed Evolution
in MW



Future data in the chart above comes from contracts already confirmed in auctions and transactions completed in the free market. New auctions will add further capacity in coming years.

Records
by area

Source: CCEE / ABEEólica

NE 94.40%

of the energy consumed in Northeast subsystem came from wind farms, with a capacity factor of **71.14% and generation of 9,255.73 MWmed.** *(06/AUG/2020)*

S 16.90%

the energy consumed in South subsystem came from wind farms, with a capacity factor of **85.41% and generation of 1,705.09 MWmed.** *(25/MAY/2020)*

N 7.44%

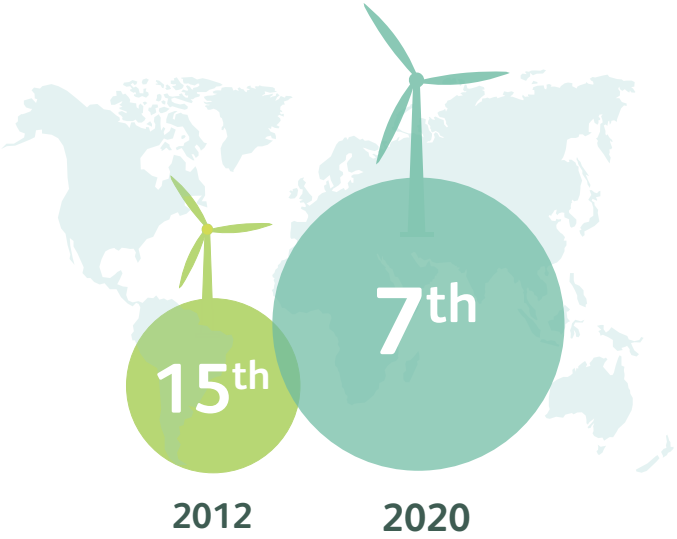
of the energy consumed in North subsystem came from wind farms, with a capacity factor of **95.73% and generation of 407.82 MWmed.** *(21/DEC/2019)*

SIN 17.00%

of the energy consumed in National Interconnected System came from wind farms, with a capacity factor of **75.52% and generation of 10,677.60 MWmed.** (06/09/2019)

International comparisons
GWEC

Brazil is ranked 7th in the World Ranking of wind energy installed capacity
In 2012, Brazil was ranked 15th



Source: GWEC

Did you know?

80% of Brazilian wind farms are in the Northeast, a region that has one of the best winds in the world for producing wind energy.

The favorable winds for producing wind energy are more constant, have a stable speed and do not change direction frequently.

Favorable winds in Brazil

34% is the Capacity Factor approx. global average.

40.6% was the average Capacity Factor in Brazil in 2019.

59% was the largest average monthly Capacity Factor that wind energy in Brazil achieved during the "Wind Harvest" period in 2019."

ABEEólica
Associação Brasileira de Energia Eólica