# BRAZILIAN News

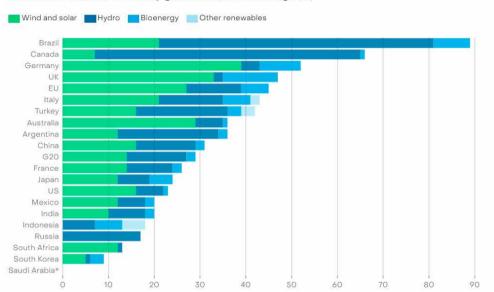
# Brazil: Waking up to the Sun, Water and Wind Energy Sources

# Brazil is the leader in the G20 in terms of renewable electricity, where it had around 89% share in 2023

"The rest of the G20 can follow Brazil's successful model and lead the global transition to a future of sustainable energy. In terms of renewable

#### Brazil has the highest share of renewable electricity in the G20

Renewable share of electricity generation, 2023 rankings (%)



Source: Yearly electricity data, Ember \* Saudi Arabia only has data for 2022, the latest available data. energy, Brazil is the leading country among G20 Group, taking up around 89% share during the year of 2023", said Kostantsa Rangelova, Global Electricity Analyst of Ember (www.ember-energy.org).

With a strong tradition in hydroelectric matrix energy use, local governments and companies have used new and clean sources more, such as solar and wind power.

According to Ember, the energy share is divided into 60% from hydroelectric, 11% from non-renewable, 8% from bioenergy, and 21% from wind and solar, the last of which is so much to acquire.

#### EMB=R

### NEF: Toward Total Renewable Energy

#### The Brazilian fastener manufacturer's way of sustainable footprint

A Brazilian firm founded in 1980, Naschold Elementos de Fixação (NEF) manufactures several kinds of metallic items through cold forming process. Its portfolio includes small sizes of rivets, screws and bolts, pins (flat, knurled, smooth), rollers for bearings, all produced using equipment from National Machinery, a North American manufacturer specialized in the fastener sector.

Recently, NEF has invested in modernization towards sustainable energy, in which the finish line will 100% electricity supply through the sun, said Roland Naschold, the CEO.





### Belenus Green Energy Goes Green

One of most important players in the South American fastener market is going green to get sustainable electric energy sources

Located beside Belenus fastener factory in Vinhedo town, SP state, Brazil, the company opened in 2024 a new building spanning 25,000 m², accommodating around 450 employees. It is becoming 100% self-sufficient in electrical energy thanks to extensive installation of photovoltaic generators and batteries.

Overall, the green energy installation has 2,260 550W modules, 60 5kW/h batteries, 5 50kWp hybrid inverters, which are able to generate approximately 150,422kWh per month.

## Metalúrgica SAM, a Nut Expert Since 1964

A Brazilian manufacturer with total focus on nuts, mainly supplying heavy metallic items, Metalúrgica SAM was founded in 1964, in Sao Paulo City, SP State, Brazil. The company is led by Mr. José Ferreira Rosa (Zinho), the owner and CEO, since 2000.



Metalúrgica SAM is a nut manufacturing expert for customers who operate as suppliers in the automotive, road and agricultural equipment, machinery, oil and gas, etc.

Its nuts are manufactured in compliance with ISO 9001 standards and CRC (Certificate of Cadastral Registration issued by Petrobras), using pressing and machining processes, including CNC machining, to produce a wide range of sizes from M3 to M120, all done at the industrial unit in São Bernardo do Campo, SP, headquarters spanning more than 2 thousand m², capable of processing more than 130 tons per month.

"We can manufacture very large nuts every five minutes", said Zinho, who spent almost three decades as manager of the famous Cisplatina, a fastener distributor. He left Cisplatina to take care of the already existing Metalúrgica SAM, which is abbreviated from the names of the former owners: Salvador, Alcides and Manoel.

"I took over Metalúrgica SAM when it was in the Lapa neighbourhood, SP, at 36 years old and had five employees (today there are 40); I decided to keep the name out of respect for the already renowned founders", recalled the CEO.

