



Metrology Over the River

54th Meeting of the International Committee of Legal Metrology

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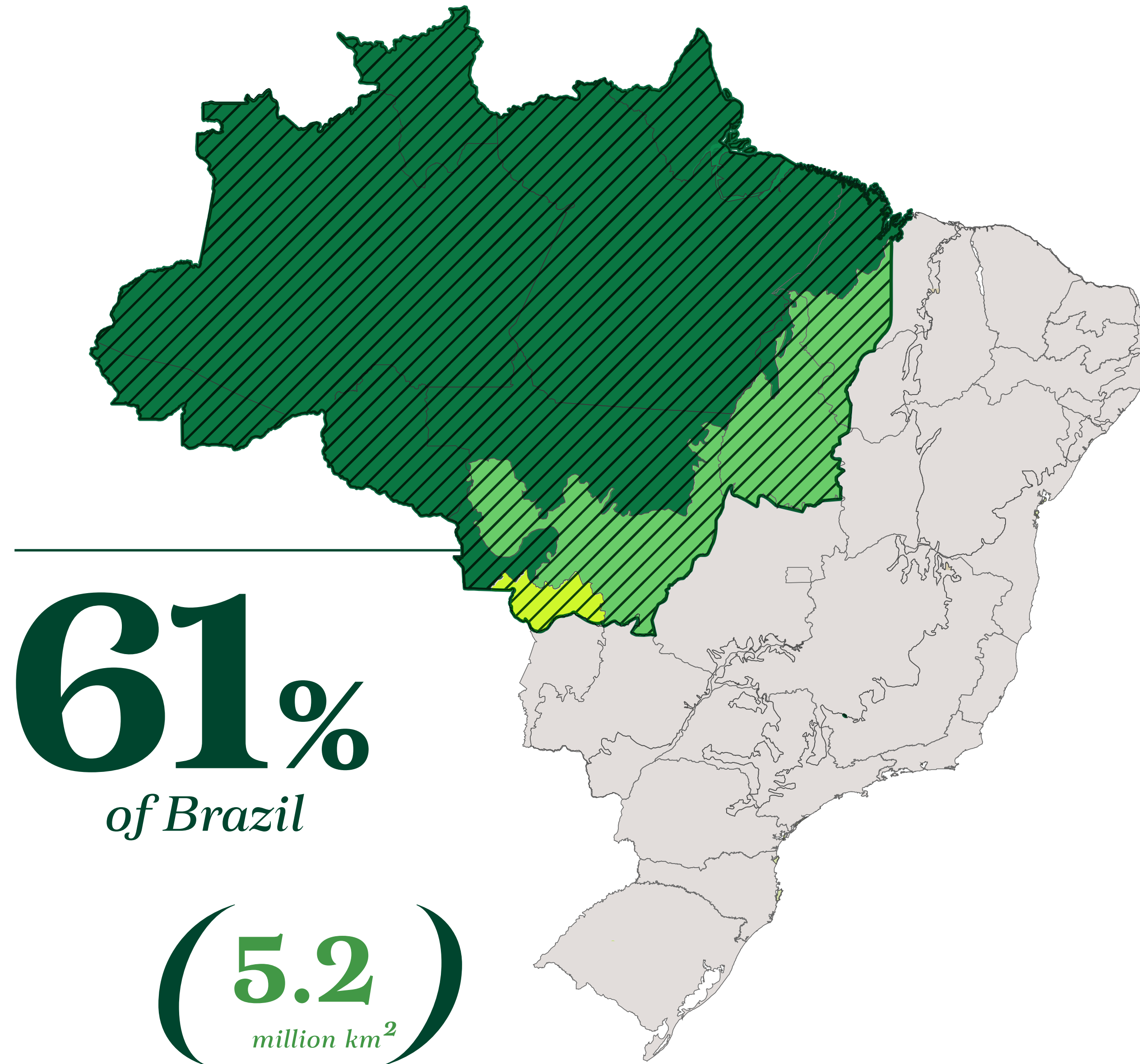


An aerial photograph of a dense, lush green forest canopy, showing a vast expanse of trees with varying shades of green and some darker patches of shadow.

Amazon

You need to know

Legal Amazon



- Administrative political concept adopted in the 50's
- **Includes 9 states** – Acre, Amapá, Pará, Amazonas, Rondônia, Roraima, Mato Grosso, Tocantins e Maranhão and **3 biomes** – Amazon and parts of Cerrado and Pantanal
- All deforestation and fire data are reported by Brazil as Legal Amazon

Source: IBGE – Geoscience (Map of biomes and vegetation). Last available data.

Amazon Biome

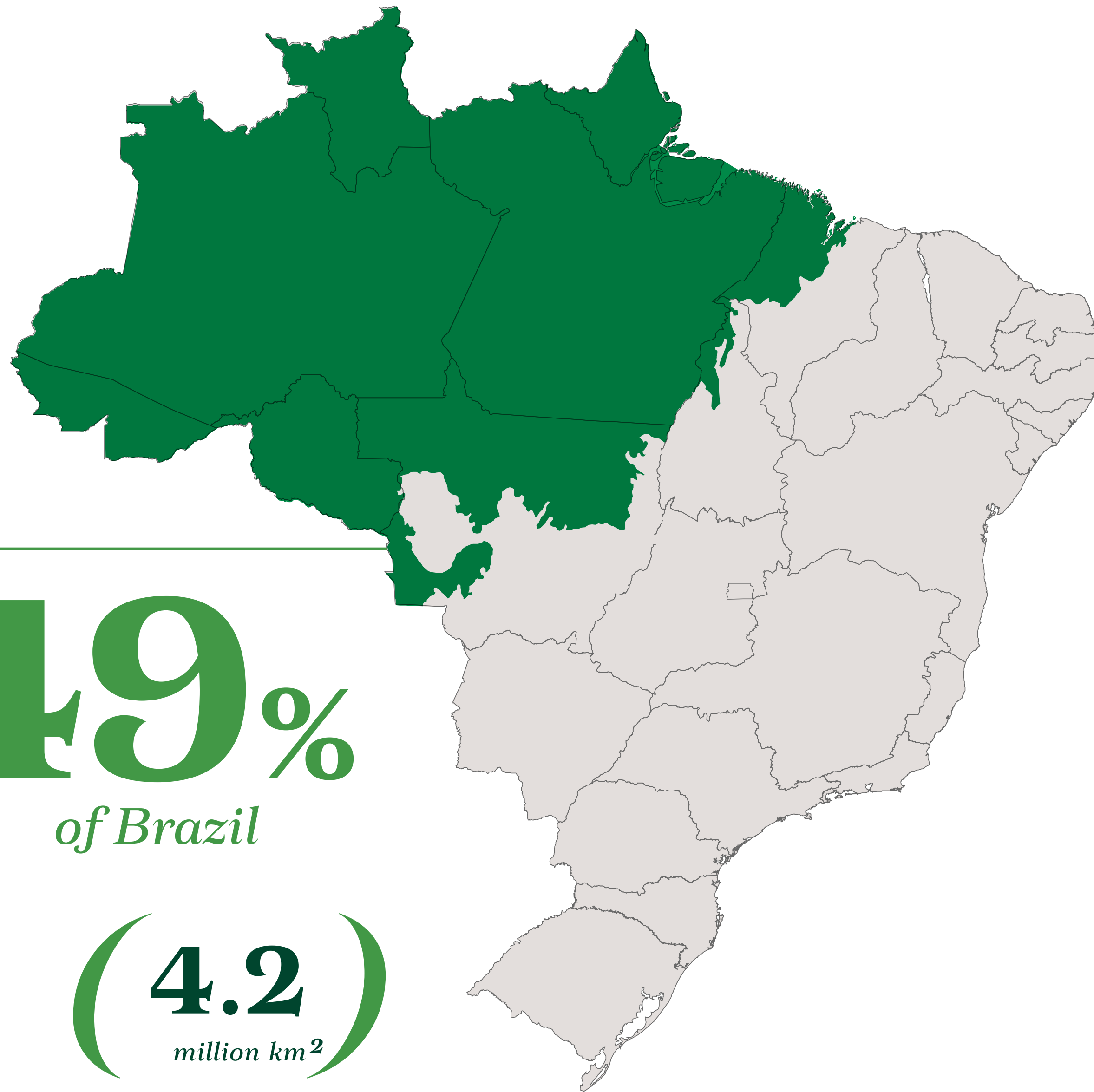
*Area where
the Amazon
Rainforest is*

49%

of Brazil

(4.2)

million km²



Source: IBGE – Geoscience (Map of biomes and vegetation).
Last available data.



Amazon Biome

84%

is covered with
native vegetation

Source: Territorial Embrapa (Strategic Territorial Intelligence Group - GITE). Last available data.



Amazon

Biome

Native Vegetation



3.52 *million
km²*

of native forest, the largest
remaining rainforest on the planet,
equivalent to the area of

15 European countries combined

Some data about Amazonas:

Amazonas is located in the Northern Region, being the largest state in Brazil in territorial extension, with an area of 1,559,146,876 km², constituting the ninth largest subdivision in the world, being larger than the areas of France, Spain, Sweden and Greece combined. It is the sixteenth largest country in the world in territorial area, higher than Mongolia.

The Gross Domestic Product (GDP) of Amazonas is the 15th largest in Brazil, US\$ 21.4 billion in 2016, while the per capita GDP was US\$ 5.350. Pará and Amazonas together account for approximately 70% of the Brazilian northern economy.

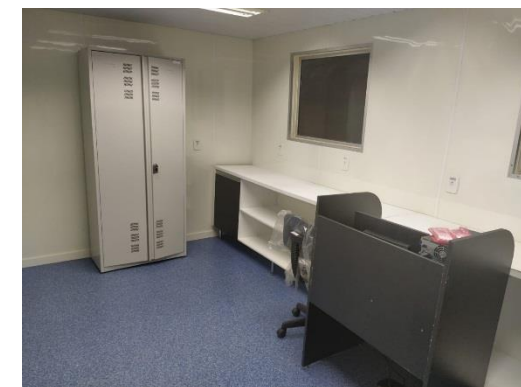
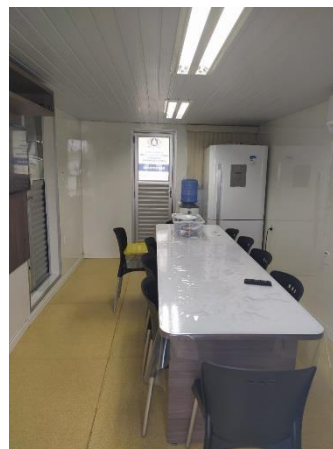
Boat transportation is the most relevant kind of transportation in the Amazonas counties.

- Number of Counties: 62
- Population in 2019: 4.144.597
(about 2% of the Brazilian population)



INMETRO - IPEM/Amazonas Boat Surveillance Unit





INMETRO - IPEM/Amazonas Boat Surveillance Unit

In 2017 began the construction of the second boat laboratory of the Institute of Weights and Measures of the State of Amazonas (IPEM/AM), a vessel that became a reference in the world.

The expansion of IPEM/AM through fluvial laboratories facilitates the interior manufacturers, who need certification for their products.



INMETRO - IPEM/Amazonas Boat Surveillance Unit

One of the boat surveillance units operates on metrology and research linked to international water and food regulation agreements another operates on water and food research in the Amazon region.



INMETRO - IPEM/Amazonas Boat Surveillance Unit



IPEM/AM performs inspection services at gas stations, commercial scales, prepackaged products, certified products (toys, helmets, lighters, fire extinguisher), blood pressure equipments, in addition to guidance to consumers and entrepreneurs through Inmetro booklets.

Besides that, the boat issues ID cards, performs marriages, baptisms and other civil and human right services.



INMETRO - IPEM/Amazonas Boat Surveillance Unit

In the first 6 months, the Boat unit visited more than 45 Amazon cities through the Juruá, Solimões, Madeira and low Amazonas rivers. During this period, more than 3,000 instruments were verified and 1,200 establishments received technical guidance.



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