

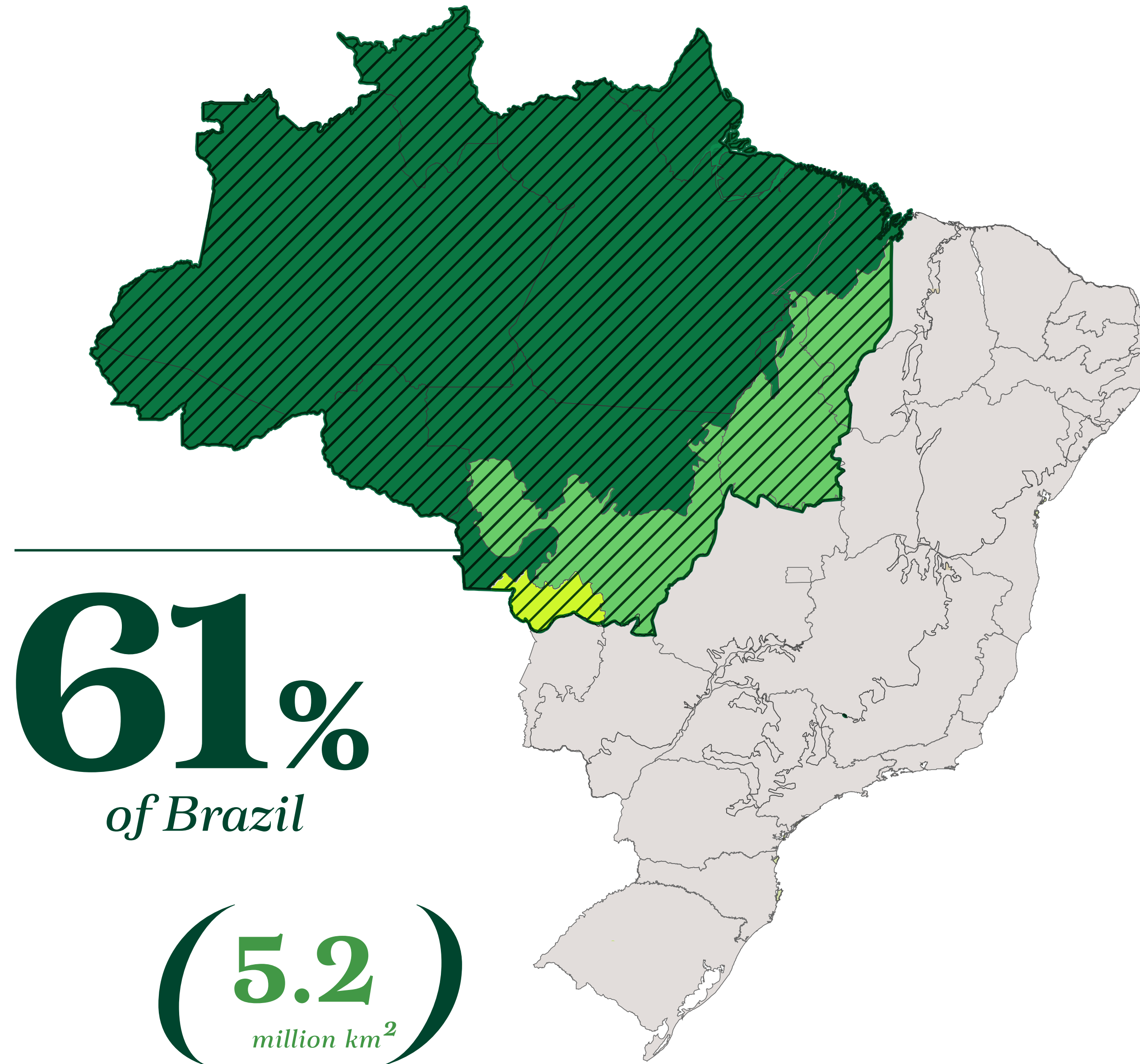
An aerial photograph of a dense, lush green forest canopy, likely the Amazon rainforest. The trees are tightly packed, creating a textured, green mosaic. The lighting is soft, highlighting the various shades of green from deep forest greens to lighter, sunlit areas.

# 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

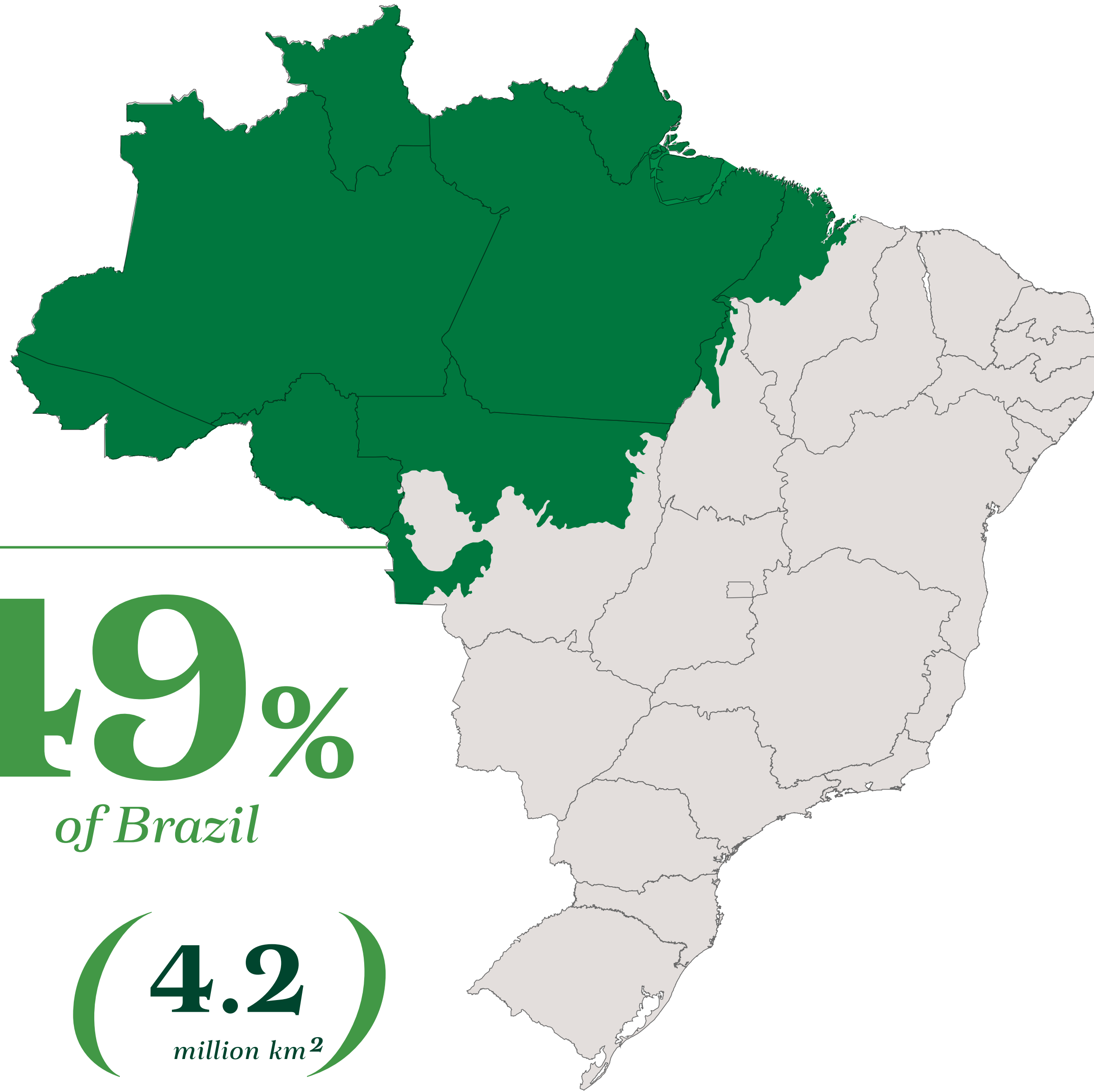
*Area where  
the Amazon  
Rainforest is*

49%

*of Brazil*

(4.2)

*million km<sup>2</sup>*



**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  
km<sup>2</sup>

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

***15 European countries combined***

**Source:** IBGE-Geoscience; IBGE-Countries; Embrapa Territorial (GITE). Last available data.



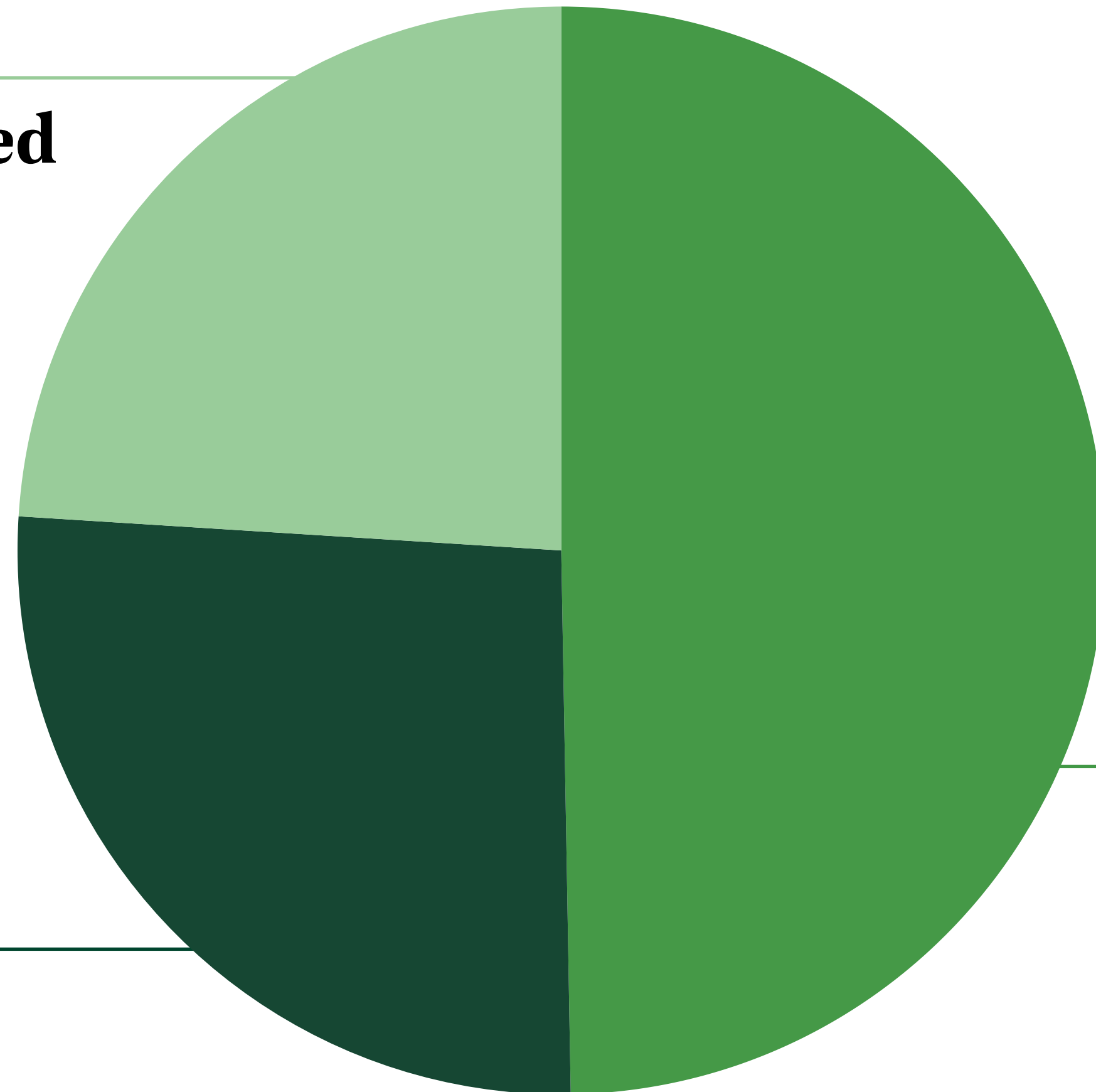
# Amazon Biome *Native Vegetation*

25%

is in unregistered  
areas

26%

is privately  
owned



49%

is in areas  
protected by law  
(conservation units  
and indigenous  
reserves)



# Amazon

## Biome

### *Private Properties*

All private properties in Brazil are governed by the **Brazilian Forest Code**, one of the most advanced environmental laws in the world.

In the case of the Amazon biome, the code determines the **preservation of 80%** of native vegetation

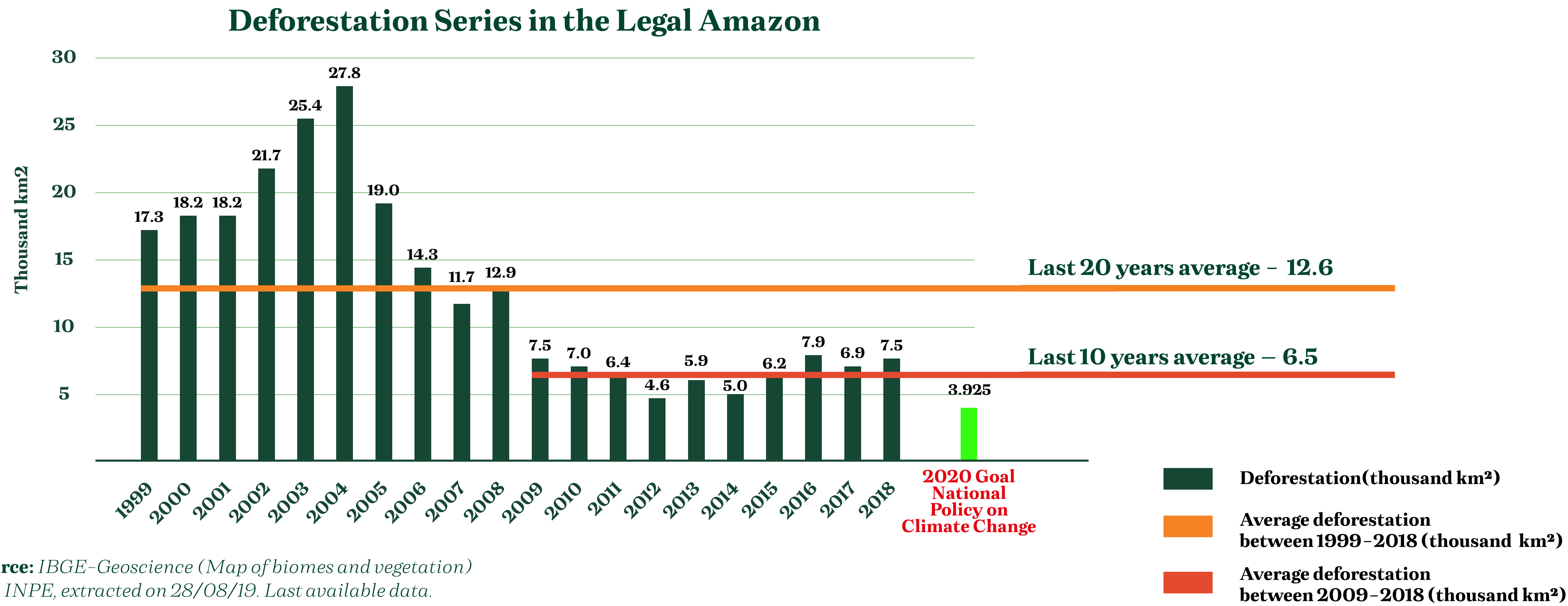
### *Private property in the Amazon*





# Fight against deforestation

In the last decades, Brazil has intensified a set of public policies to combat deforestation



Source: IBGE-Geoscience (Map of biomes and vegetation) and INPE, extracted on 28/08/19. Last available data.

• Law 121887/19 and Decree 9578/18



*Although deforestation  
is within the historical average*  
**the national commitment**  
*set out in the climate change policy*  
**must be met**



# Fires

Fires in the Legal Amazon is a typical dry season phenomenon that recurs annually. They may be associated with human action or natural causes

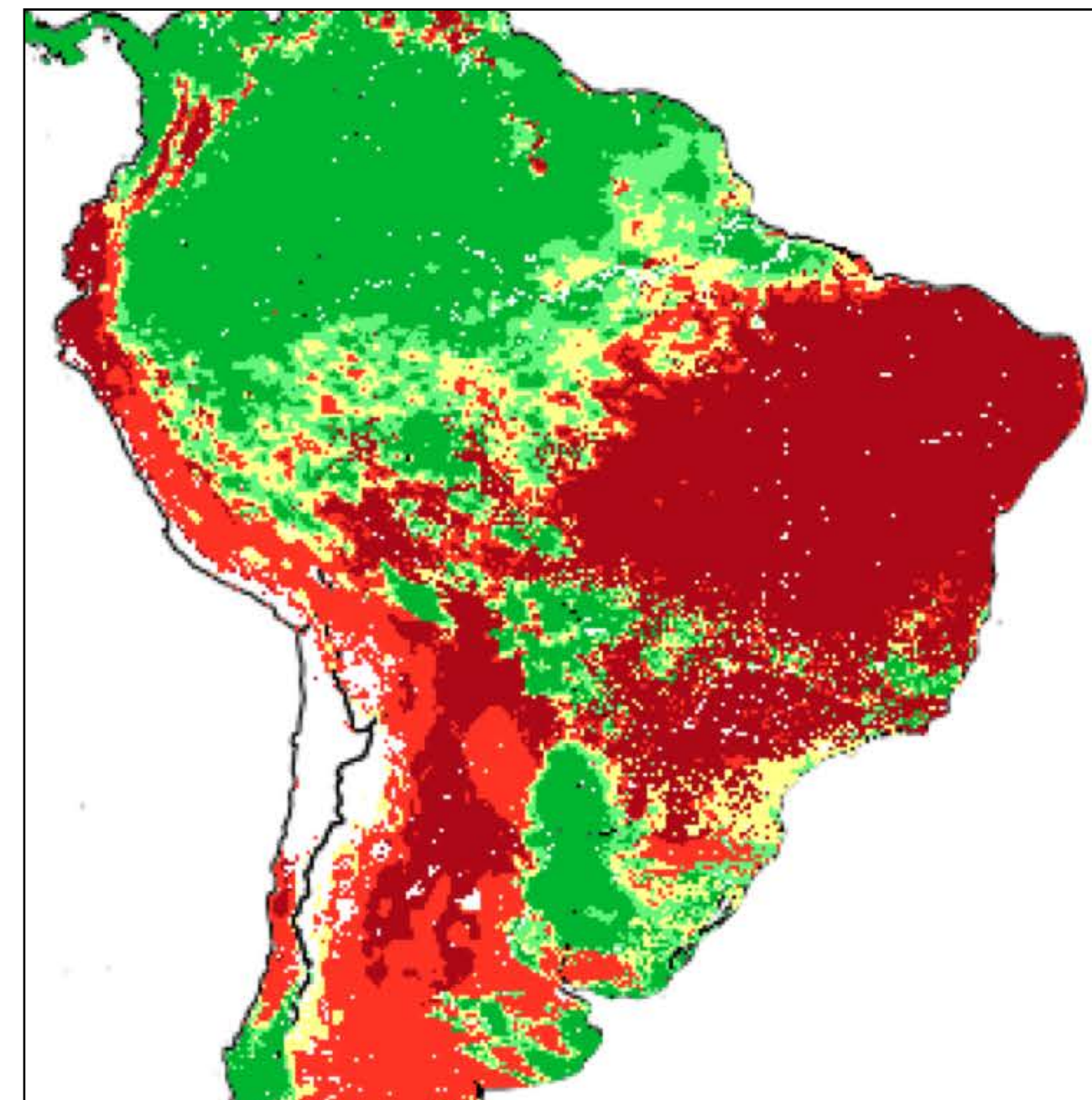
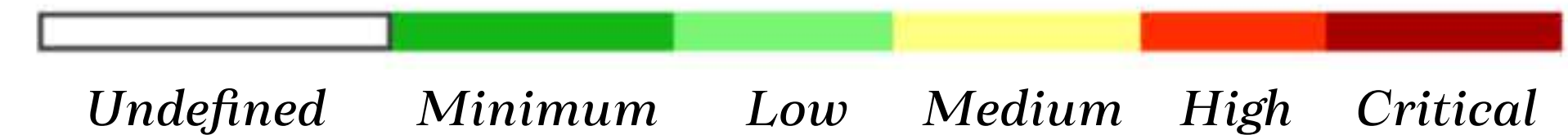




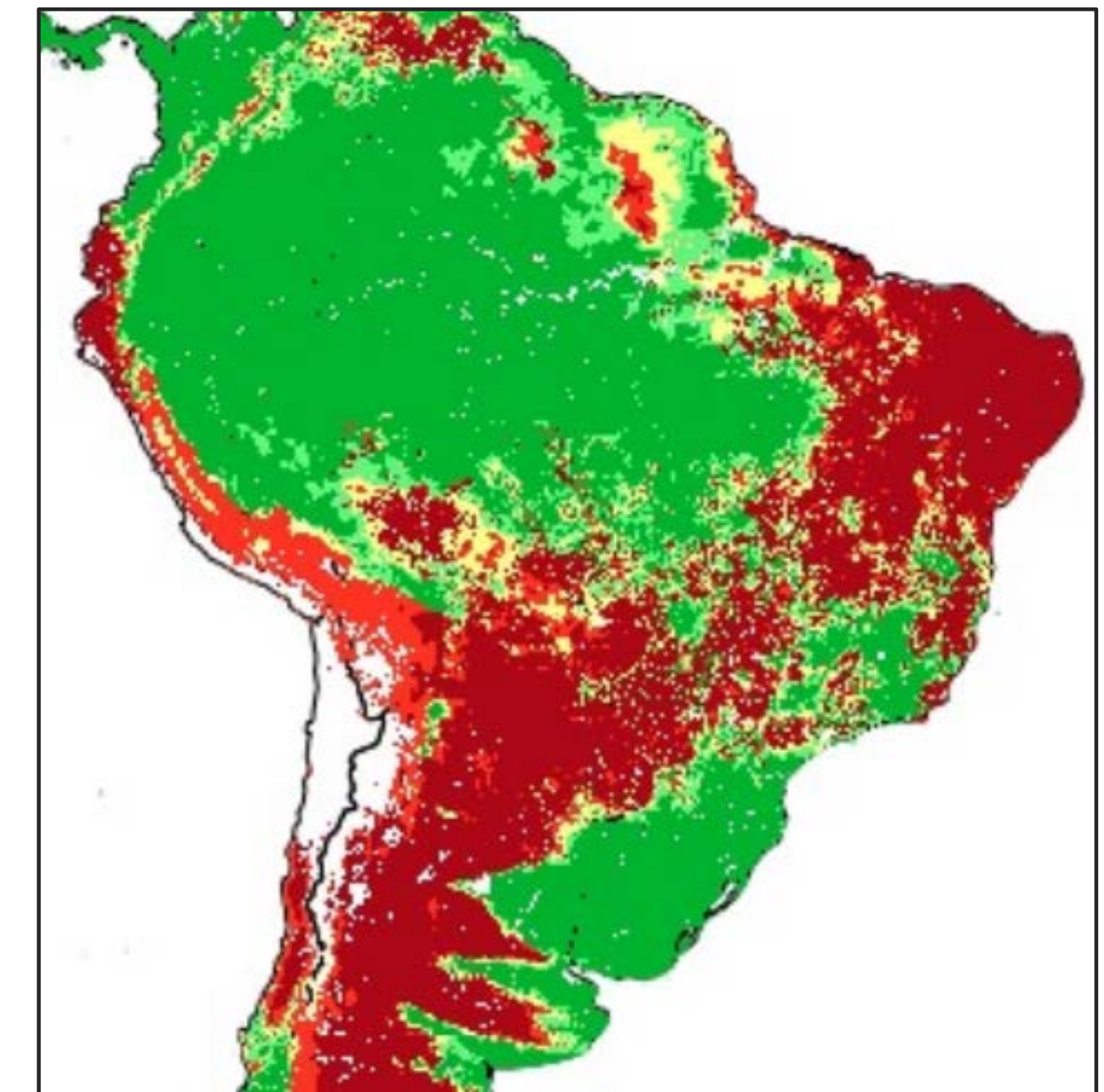
# Risk of fires

Fires occur predominantly  
in Cerrado areas, transition  
environments and already  
open areas

**risk of burns predicted by INPE**



**08.30.2019**



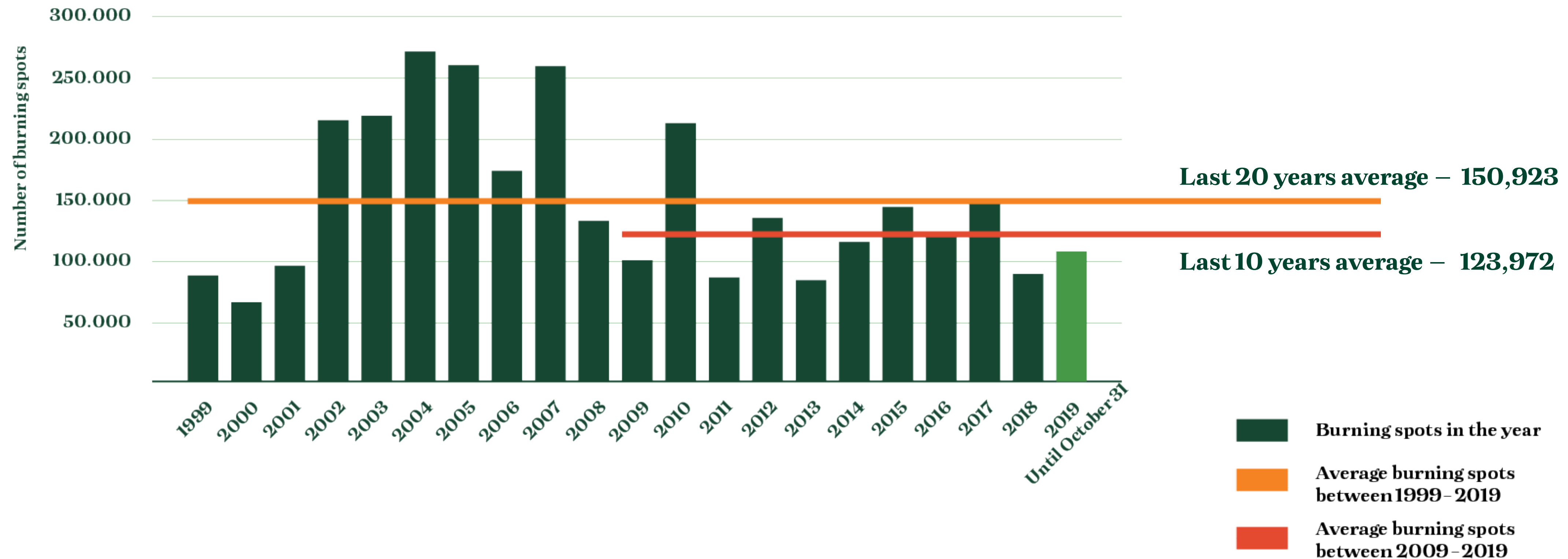
**10.31.2019**

**Source:** *INPE - August 30 and October 31, 2019 Daily Newsletter*



# Burning spots in Legal Amazon

## Annual Series



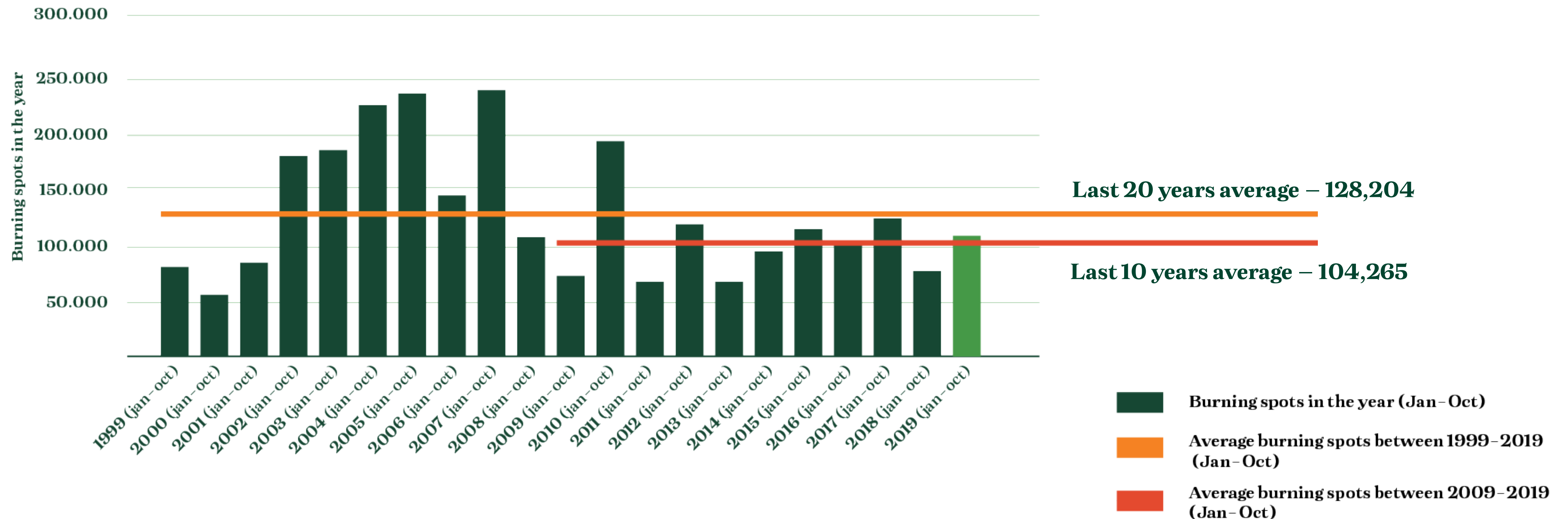
**Note:** Series of total active spots detected by the reference satellite from 1999 to October 31 2019.

**Source:** INPE – Fires Program, 2019.



# Burning spots in Legal Amazon

## January to October Series



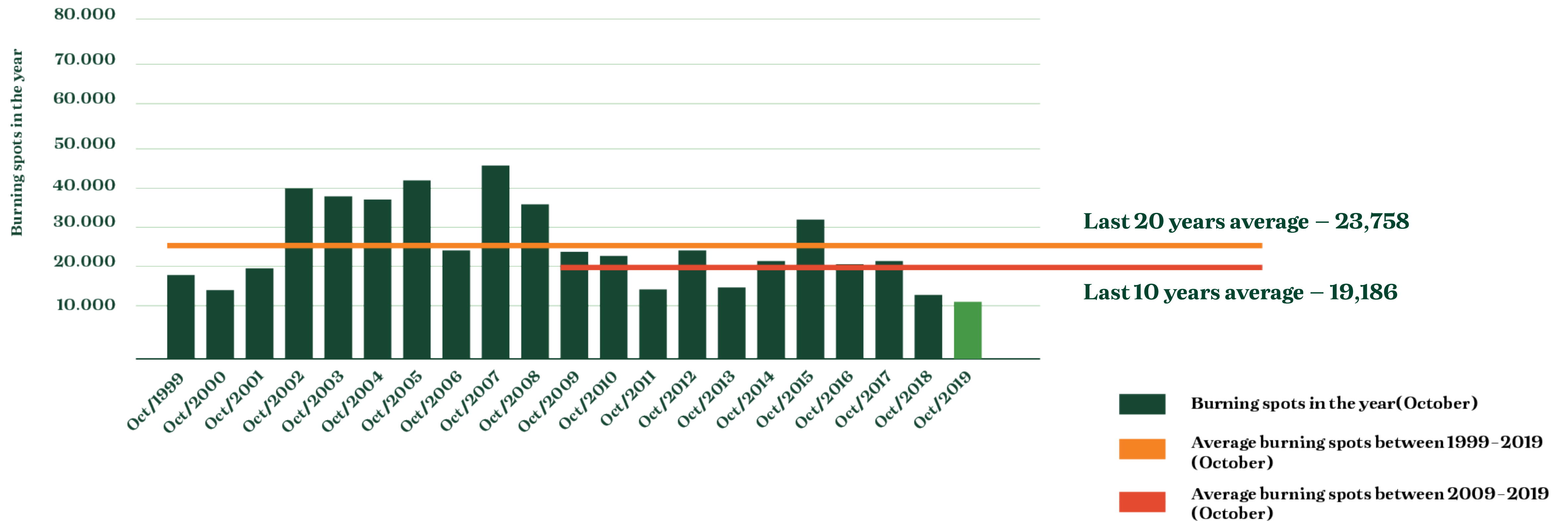
**Note:** Series of total active spots detected by the reference satellite from 1999 to October 31 2019.

**Source:** INPE - Fires Program, 2019.



# Burning spots in Legal Amazon

## October Only Series



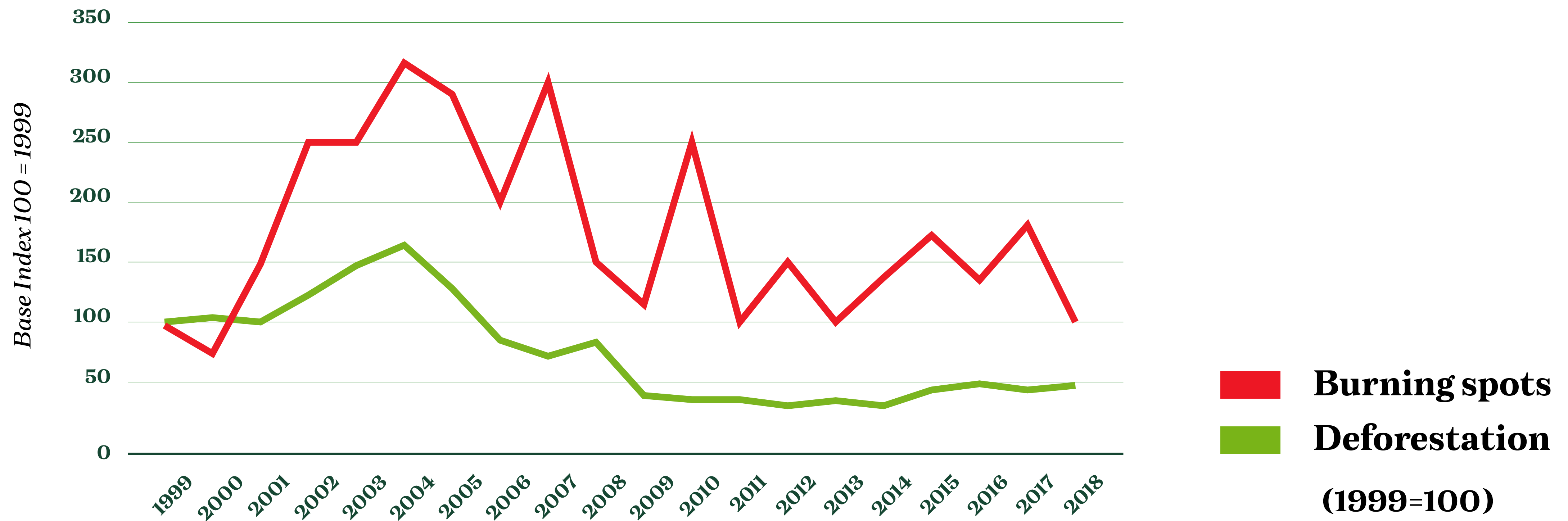
**Note:** Series of total active spots detected by the reference satellite from 1999 to October 31 2019.

**Source:** INPE – Fires Program, 2019.



# Fires <sub>vs.</sub> deforestation

## *different dynamics*



Source: INPE. Fiesp elaboration



# Burning Spots

*Although they are around the historical average,*  
**the reduction of burning spots  
must be pursued.**

*Qualifying information and understanding in which  
situations it occurs is an urgent and fundamental action  
to define reduction strategies*



# International climate *agreements*

Brazil participates in the main global agreements in force in the environmental area since the 1960s

Brazil's commitment to 2020  
**is set out in the Copenhagen  
Agreement of 2009**





# International climate *agreements*

**Main actions  
until 2020**  
(Copenhagen)

## Reduction of CO2 Emissions

**Commitment:** Reduce Emissions by 1.24 Gigatons

**How we are:** The deforestation reduction in the Amazon and Cerrado alone has mitigated CO2 emissions by 2.28 Gigatons



# The Paris Agreement

*has already been signed and ratified,  
with goals for 2025 and 2030.*

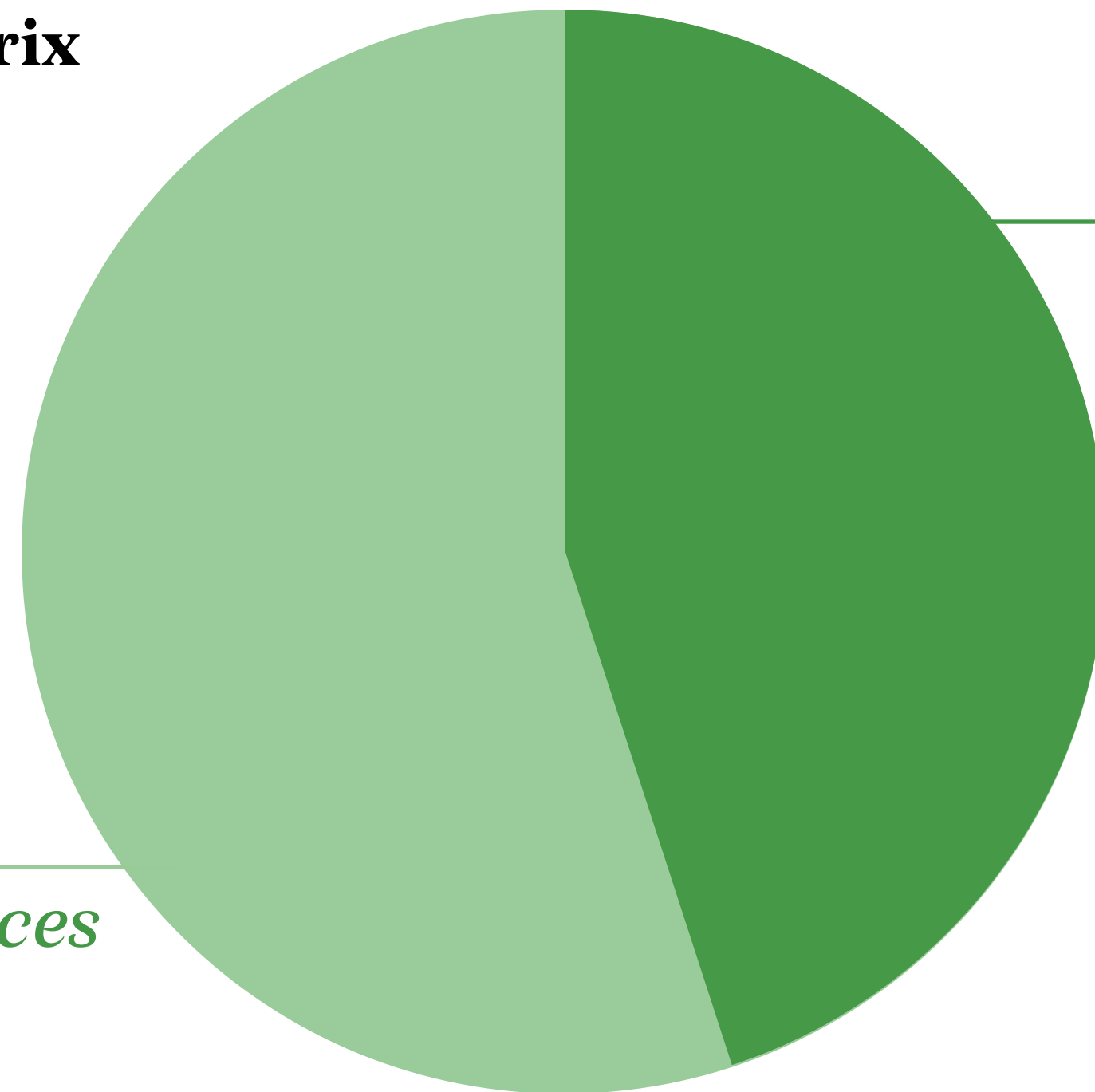
Brazil is already doing its part:

Commitment	2030 Goal	Already done in 2018
Increased participation of biofuels in the energy matrix (Renovabio)	18%	17.4%
Percentage of renewables in the energy matrix	45%	45.3%
Increased share of renewables in energy matrix. except hydroelectric	> 28%	32.7%



# Energy Matrix

Brazil has **the cleanest and most diverse energetic matrix on the planet**

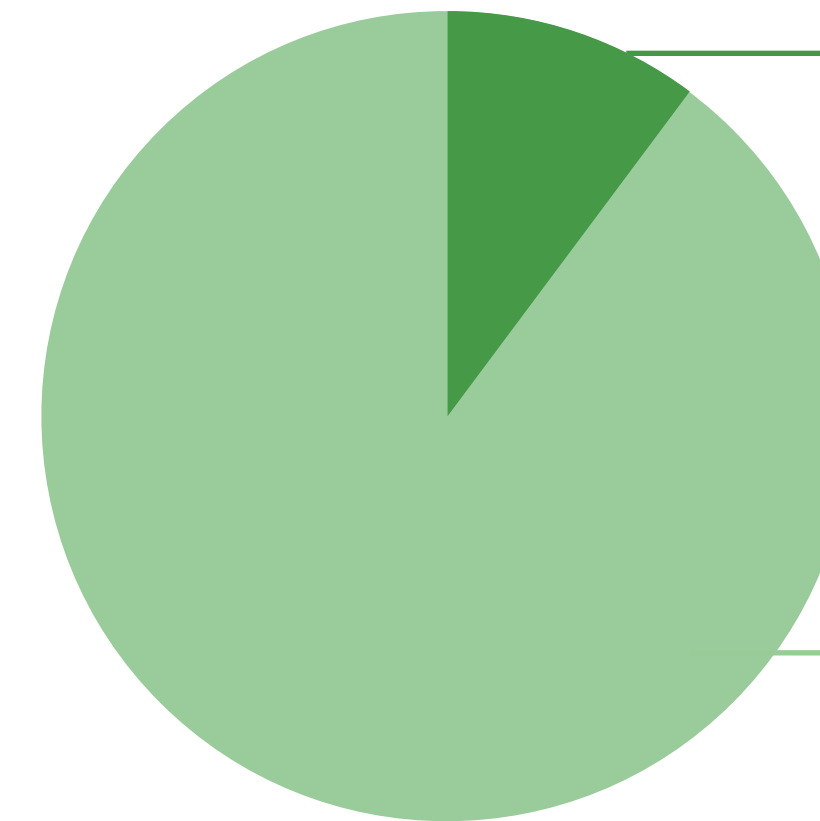


**Brazil**  
**45%**

*renewable sources*

*other sources*

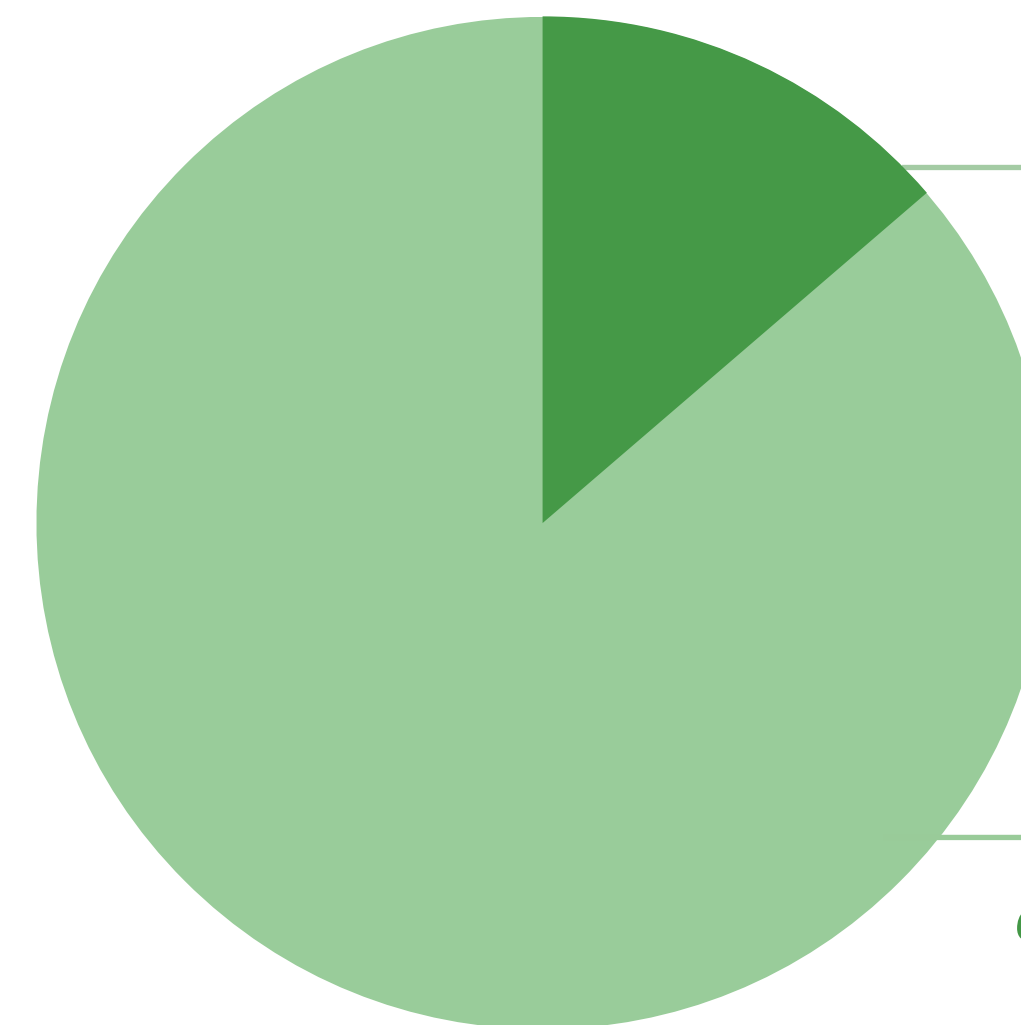
**OECD**  
**10%**



*renewable sources*

*other sources*

**World**  
**14%**



*renewable sources*

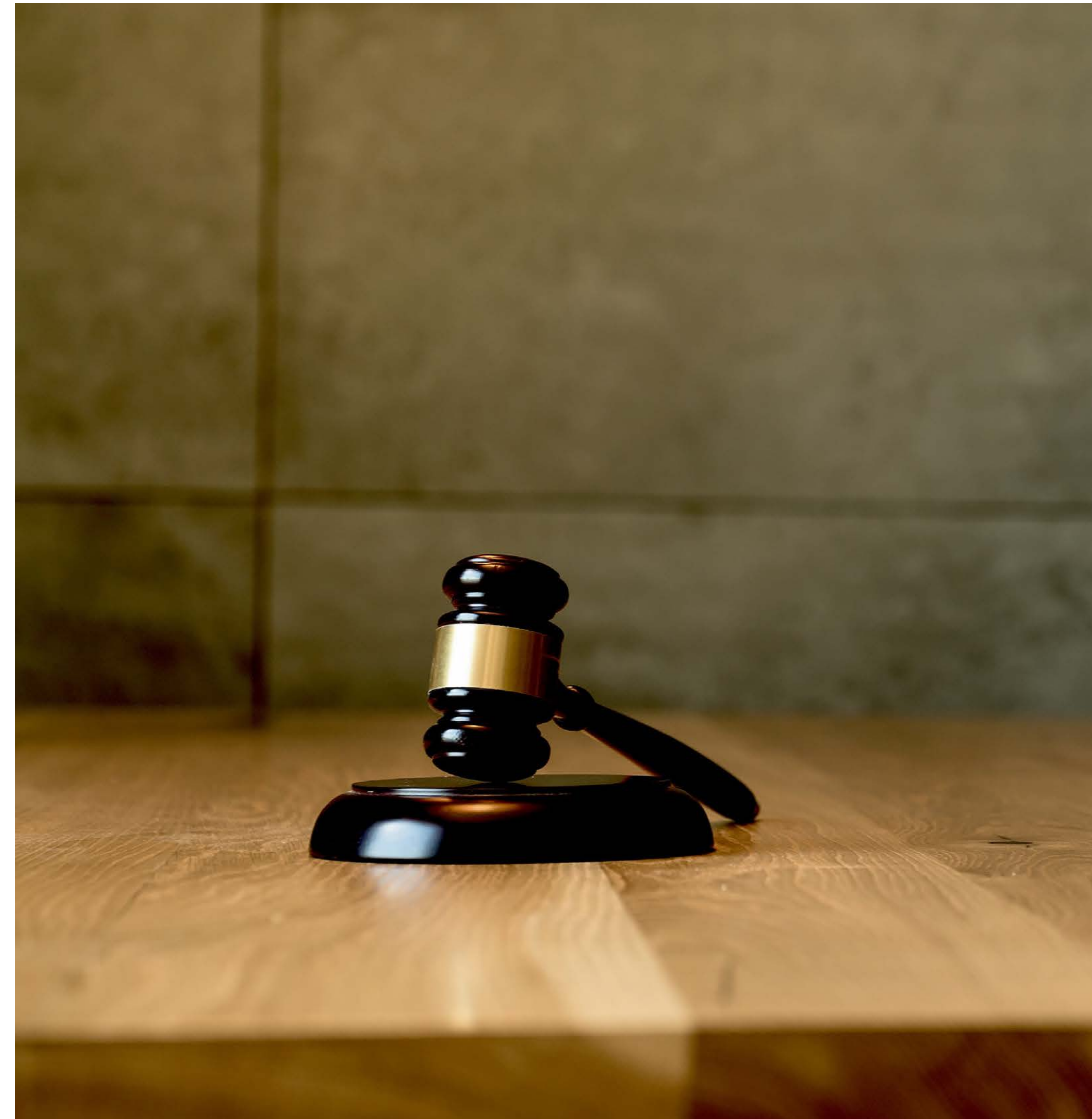
*other sources*



# Legal Framework

In the last decades, Brazil has built one of the most robust sets of norms and laws in the world to ensure *the sustainable production and rational use of its natural resources*.

Additionally, we have private initiatives in the main production chains that reinforce this commitment

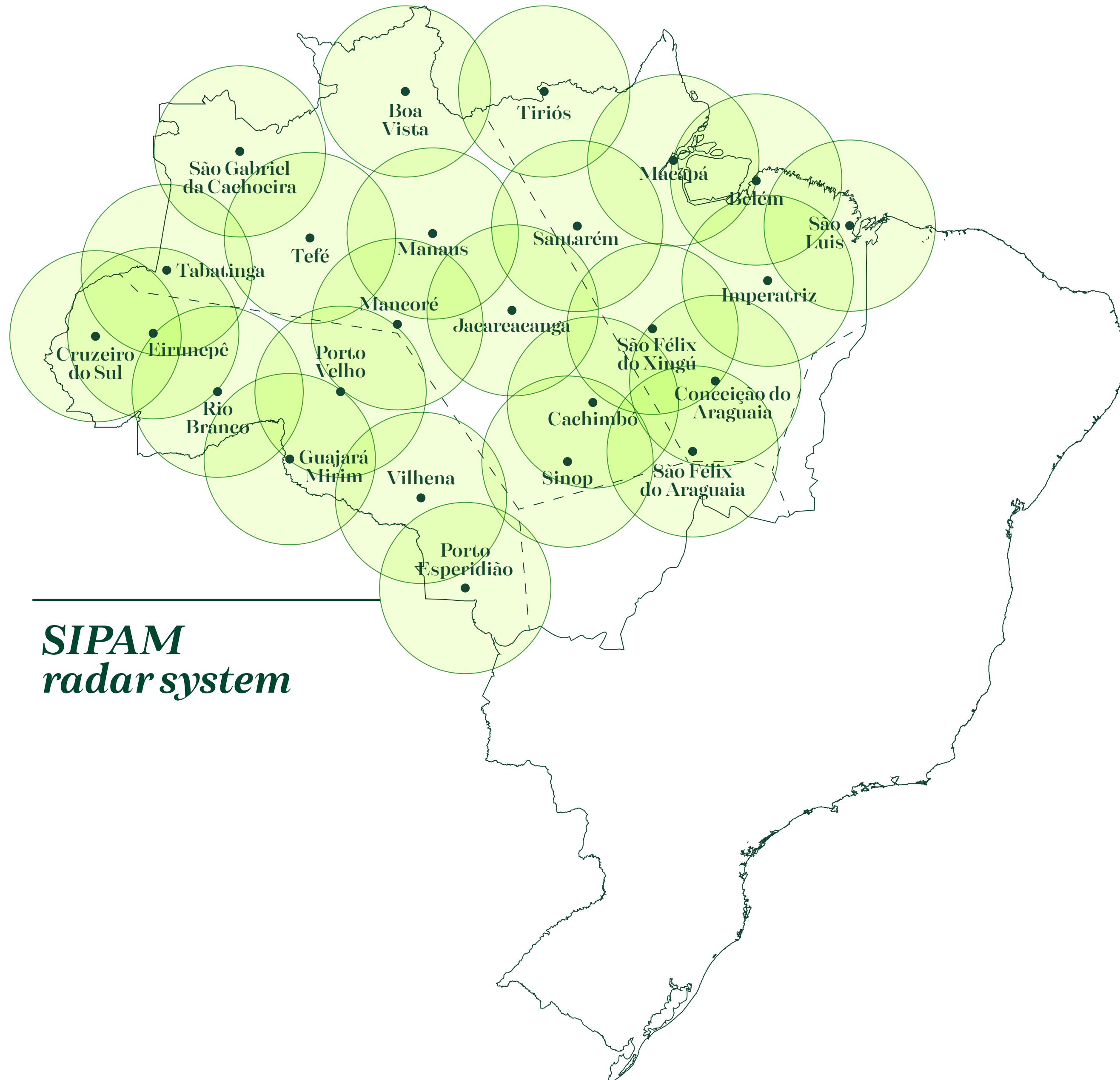




# Monitoring Technology

Brazil has invested and developed very sophisticated systems to monitor everything that goes on in the Amazon. Today, different agencies monitor the region such as INPE, EMBRAPA, IBGE and CENSIPAM

***Official databases are able to show in detail everything that goes on.*** And these technologies advance every day. They will be increasingly effective



***SIPAM  
radar system***



# Preserve and Produce

*Brazil is a global leader in tropical forest conservation*, has the cleanest and most diversified energy matrix and still manages to be the largest net food exporter to the world, reaching over 200 markets

*We preserve and produce with excellence and quality*





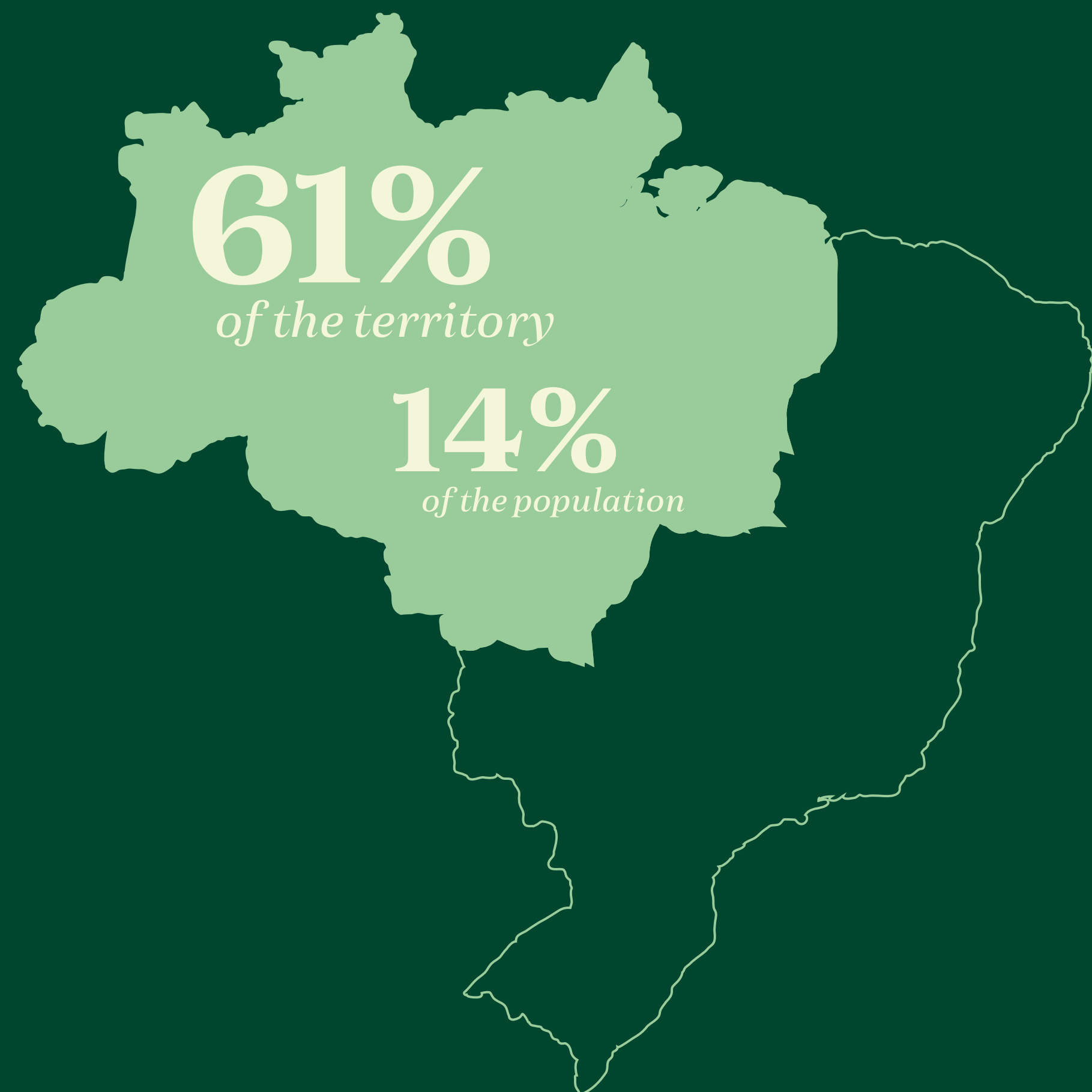
*Illegal deforestation*

**must be restrained**

*with sustainable public policies that generate income, access to technology and strengthening of monitoring and enforcement actions*



# Legal Amazon



**29** *millions*  
*of people concentrated*  
*in urban areas*

<i>Legal Amazon</i>	<i>Brazil</i>
<b>6</b> <i>inhabitants/km<sup>2</sup></i>	<b>22</b> <i>inhabitants/km<sup>2</sup></i>

**Source:** IBGE-Geoscience and Population Estimation, 2019 and UN (Population Division).  
Latest data available.



# • Harmonic coexistence *is necessary*



*Standing forest*



*Economic  
activities*



*Families  
wellbeing*



The Federation of Industries of the State of São Paulo conducted this analysis of the Amazon based on public data and primary sources of information in order to participate in the public debate and bring light to the information that has been circulating on the subject, often in a mismatched manner.

## **Sources consulted**

*Amazon Protection System Management and Operational Center – CENSIPAM*  
*Brazilian Agricultural Research Corporation – EMBRAPA*  
*Energy Research Company – EPE*  
*São Paulo State Federation of Industries – FIESP*  
*Brazilian Institute of Geography and Statistics – IBGE*  
*National Institute of Meteorology – INMET*  
*National Institute for Space Research – INPE*  
*Ministry of Mines and Energy – MME*  
*Ministry of Environment – MMA*  
*United Nations – UN*





Federation of Industries  
of the State of São Paulo