





WHAT PROGRESS LOOKS LIKE

BRAZIL - WASTEWATER TREATMENT

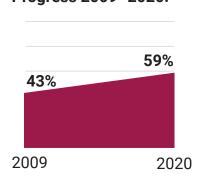
(SDG TARGET 6.3)

Progress indicator: Proportion of wastewater flow treated

Progress 2009–2020:

Level of impact: National (213 million people and \$2,989 billion in gross domestic product) **Result:** Wastewater treatment improved by 16 percentage

Result: Wastewater treatment improved by 16 percentage points, thanks to large-scale investments including the construction of 900 new treatment plants.



SITUATION

Water management in Brazil is based on multiple water uses and is organized by river basin – the country is divided into 12 hydrographic regions, the largest being the Amazon basin. While the provision of water and sanitation services in Brazil is decentralized, the National Water and Sanitation Agency (ANA) is the central institution responsible for managing water resources, implementing the country's National Water Resources Policy, and defining reference standards for the regulation of basic sanitation services. ANA also monitors the conditions and the management of water resources in the country, including the SDG 6 indicators, together with other institutions, such as the Brazilian Institute of Geography and Statistics, the Ministry of Health, the Ministry of Regional Development, the Geological Survey of Brazil and the National Water Resources Council.

In Brazil, wastewater data are collected from local service providers (5,570 municipalities and some 3,700 treatment plants), which primarily serve urban households and the service sector, as well as a small portion of the industries located in urban areas. The

progress reported therefore primarily refers to urban areas (home to 85 per cent of Brazil's population), the domestic and service sector (representing 70 per cent of Brazil's gross domestic product) and, to a lesser extent, rural areas and the industrial sector.

In 2020, about 55 per cent of the population were connected to sewage collection networks, whereas 20 per cent relied on septic tanks not connected to collection networks. The remaining 25 per cent of the population relied on unimproved sanitation services. The most effective wastewater treatment plants are located in the most populous state, São Paulo, in the southeastern part of Brazil.

PROGRESS MADE

In 2020, about 59 per cent of the wastewater generated in Brazil was treated, which represents an increase of 37 per cent or 16 percentage points since 2009. Of this, approximately three quarters of the flows came from centralized treatment plants, while the remaining 16 per cent was from decentralized solutions, such as septic tanks at the user's own place of residence.





The increase in wastewater treatment was possible thanks to an increase in the population served by sewage collection networks and the population served by septic tanks, as well as the capacity for centralized treatment. Thus, this positive evolution goes beyond sewage collection and treatment, with septic tanks playing a fundamental role in the management of wastewater, especially in rural areas.

As part of the National Basic Sanitation Plan, between 2013 and 2019, 900 new wastewater treatment plants came into operation. This was possible thanks to significant financial resources (budget and loans) for sewage being made available between 2003 and 2017. Through the federal government's Growth Acceleration

Program, approximately 51 billion Brazilian reais were invested during the period.

Even so, it is worth noting that two-thirds of municipalities in Brazil still do not have sewage treatment facilities available in centralized treatment plants.

Further improvements in the monitoring of wastewater treatment are also needed to be able to better assess the situation in rural areas and the wastewater flows from industry. While data on wastewater treatment for specific point discharges from activities such as agriculture, livestock and industry do exist, they are not systematically compiled at the national level.

KEY SUCCESS FACTORS

- Information campaigns on the links between sanitation and the environment in the 1990s
- Large-scale federal investments in the sector starting in the 2000s
- Institutional capacity to absorb investments and build sewers and treatment plants in the 2010s

LEARN MORE

- Sistema Nacional de Informações sobre Recursos Hídricos [National Water Resources Information System], including *Atlas Esgotos* [Sewage Atlas] (2017) and *Estações de Tratamento de Esgotos* [Database of Treatment Stations] (2020)
- · National Sanitation Secretariat and National Sanitation Information System
- SDG 6 in Brazil: ANA's Vision of the Indicators, 2nd Edition (2022)
- Overall progress on SDG 6 in Brazil