

Factsheet - Key Sector Decarbonisation, Agriculture & Land Use

Short form analysis by CAT - for more information visit www.climateactiontracker.org

For more complete analysis please visit climateactiontracker.org/countries/brazil

Electricity & Coal in Total Primary Energy

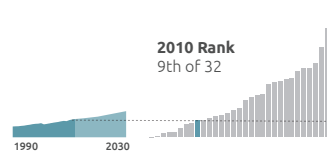


In 2012, the electricity sector was the third biggest contributor to energy-related emissions, reaching 75 MtCO₂eq. The main drivers behind the growth of electricity emissions are the electrification national programs, which have enhanced electricity access of rural population, and an increase in the use of fossil fuels in the sector in the last years.

Regarding the sector indicators, Brazil has one of the lowest emission intensities of energy in the world (37 tCO₂/TJ in 2012) due to the large share of hydro energy in the energy mix. Future emission trends will be determined by the balance between renewable sources of energy and fossil fuels in covering the increasing demand and energy efficiency measures, which have a strong potential in Brazil. In this regard, the INDC targets are to increase the share of renewables (other than hydropower) in the power supply to at least 23% and achieving 10% efficiency gains in the electricity sector by 2030.

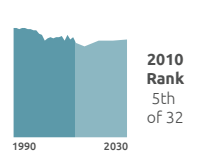
Electricity Demand per Person

2245 kWh / person



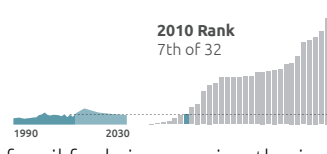
Renewables Share of Electricity

85%



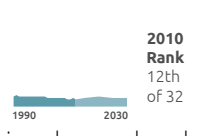
Electricity Emissions Intensity

86 g CO₂ / kWh



Coal Share of Primary Energy

5%



Transport

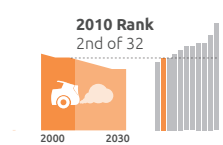


In 2012, emissions from the transport sector accounted for the largest share of energy-related emissions (45%), reaching 200 MtCO₂eq, 90% of which was from road transport. Emissions have been increasing in the recent decades mainly due to increased vehicle ownership, a result of economic growth.

Plans to reduce emissions include increasing biofuel consumption and higher fuel economy standards for light vehicles. These policies have significant potential as Brazil is one of the world's largest car producers, particularly in flexible fuel vehicles (ethanol). development and

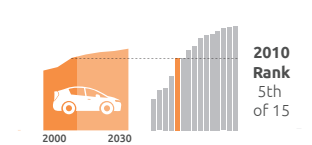
Vehicle Fleet Emissions Intensity

190 g CO₂ / vkm



Percentage of Total Travel by Car (LDVs)

63%



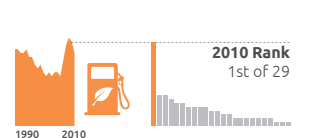
Aviation Activity

485 pkm / person



% Biofuels and electrification in road transport

22%



Agriculture



The agriculture sector is currently the most important source of GHG emissions in Brazil, with a 37% share (446 MtCO₂eq in 2012) of total emissions. The increase in emissions from this sector has been driven mainly by the significant growth in beef production. Indeed, around 56% of the agricultural sector emissions (2012) come from methane emissions from cattle-raising (enteric fermentation).

In its INDC Brazil committed to tackle agriculture emissions through land restoration. However, methane emissions are set to soar with future growth in Brazilian beef production.

Historically, most of the emissions for the Land use, land use change & forestry sector came from illegal deforestation and at the high point in 1995 represented emissions 3 times greater than those of the entire Brazilian economy. Recently land clearing in the Amazon and Cerrado regions has decreased by 96% and 60%

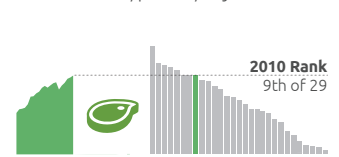
Total Food Consumption

3227 kcal/person/day



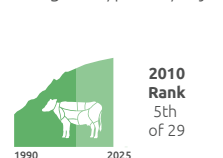
Meat Consumption

411 kcal meat/person/day



Meat Production

330 g meat/person/day



Land Use (LULUCF)



1990 2012

respectively in the period 2005-2012. If current policies for the sector are maintained and strengthened (as pledged in the INDC), the sector will likely become soon a net sink of emissions. However, higher biofuel production could lead to increased sector emissions from new land being cleared for biofuel production.