BRAZIL

MINAS GERAIS

POPULATION
20,870,000 (2018)
SCOPE
1 AND 2

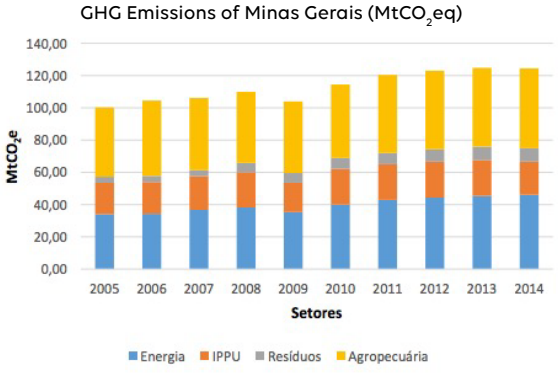
GHG TARGET:
-20% BY 2020
(BASELINE: 2005)

Agriculture: A central issue

As the third economic power in Brazil, the State of Minas Gerais is often described as a "concentration of Brazil", owing to the very strong territorial and social disparities within its territory. In 2014, it undertook the development of a Local Climate and Energy Plan (PEMC), then considered as pioneer in Brazil. This plan establishes that in 2014, the emissions of Minas Gerais were 124MtCO_2eq, i.e. a 24% increase compared to 2005 (99.5MtCO_2eq). They are distributed as follows: agriculture (40%), energy (37%), industrial processes (16%), waste (7%).

• AGRICULTURAL POLLUTION AND DEFORESTATION • Minas Gerais is the second State of Brazil in terms of livestock (23.8 million cattle in 2015) and agricultural production (rice, sugar cane and grain) with a production increasing steadily by 2% per year since 2005. **This growth has led to a 22% increase of emissions in the agricultural sector between 2005 (16.2MtCO_2eq) and 2014 (19.8MtCO_2eq),** half of which is due to land use changes and deforestation. In 2010, Minas Gerais implemented a series of law to, for example, drastically limit the practice of agricultural waste burning in plantations. This resulted in a 75% decrease of emissions related to agricultural waste between 2009 and 2015, falling from 0.66 to 0.16MtCO_2eq. In parallel, Minas Gerais set up a large programme in 2016 for the recovery of degraded pastures and limiting the effects of deforestation, which is the cause of 17% of emissions in the sector. 715 producers were trained in techniques enabling a better management of their activity, the recovery of degraded areas, and increased production and incomes of rural producers (FAEMG 2018).

• IMPROVING ENERGY EFFICIENCY IN THE INDUSTRY • In 2014, nearly one third of emissions due to energy combustion came from industrial production.



The 3% decrease of the GDP in 2009 compared to 2008 resulted in an 8% decrease of total emissions in Minas Gerais. This decrease is directly explained by the retraction of the metal industry, which saw a 39% decrease of its production in 2009, and an 8% decrease of its CO_2 emissions. Since the economic recovery of the sector in 2011, however, emissions have increased by 12%. In order to attempt to reduce the carbon and energy intensity of the industry, Minas Gerais has set up a financial support programme for the modernisation of industrial processes and the reduction of their energy consumption, aiming at reducing emissions by 79,537tCO_2eq by 2030, such as: the use of natural gas to run the turbines, the renewal of heavy goods vehicle fleets for larger vehicles that use biol-fuels, or the integration of variable-speed compressors into industrial fans so as to optimise the latter's energy consumption. In 2015, the benefits of these various measures were estimated at 500tCO_2eq.

• MEASURING AND COMBATING SOCIAL AND CLIMATE VULNERABILITY • Frequently affected by extreme climate events such as droughts and floods, Minas Gerais was the first State of Brazil to perform a diagnosis of vulnerability to climate change in 2010, updated in 2015. In 2015, the Development Bank of Minas Gerais (BDMG) and the French Development Agency financed the creation of an index of Vulnerability of Minas Gerais (IMVC) to measure the vulnerability of the State's territories to impacts related to climate changes, as well as a call for projects aimed at municipalities for mitigation and adaptation projects.

MAIN SOURCES:
PLANO DE ENERGIA MUDANCAS CLIMATICAS (2015)
ESTIMATIVAS DE EMISSÕES E REMOÇÕES DE GASES DE EFEITO ESTUFA DO ESTADO DE MINAS GERAIS - ANO BASE 2014)