



GERMANY

BADEN WURTTENBERG

POPULATION
11,023,425 (2017)
SCOPE
1, 2 AND 3

GHG TARGETS
-25% IN 2020;
-90% IN 2050
(BASELINE: 1990)

Industrial production distances the region from attainment of its 2020 targets

The founding state of the [Under2 MOU](#), Baden-Wurttemberg (B-W) made a commitment to reduce its GHG emissions by 80 to 95% by 2050 compared to 1990 ([agreement protocol](#)). According to [National Statistics Office of Baden-Wurttemberg](#), 78.4 MtCO₂eq were emitted in the region in 2016, i.e. 2.4% more than in 2015. It is the second consecutive increase, even if the overall trend for GHG emissions is downwards with a 12% decrease compared to 1990, i.e. 10.7MtCO₂eq/year less. A further overall reduction of 11.6MtCO₂eq/y is necessary to reach its 2020 target.

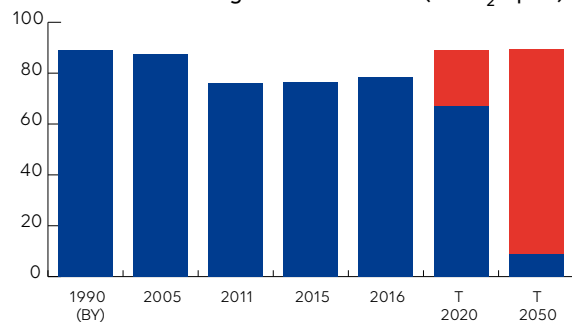
• ENERGY TRANSITION AND INDUSTRIAL TRANSITION •

The energy transition of B-W is an ambitious challenge since it must simultaneously lead to the phase out of nuclear power decided by Germany by 2022, which is at the origin of nearly 50% of its electricity. Coal-fired and gas-fired plants will have to compensate for the lower nuclear energy production, in addition to the development of renewable energy. In 2025, the latter will have to cover 25% of the end-use energy demand, and 80% of the electricity production by 2050. **In 2016, renewable energy increased by 5% compared to 2015, and by 45% since 2006 to reach 50.8TWh, i.e. 12.7% of the primary energy consumption and 32% of the electricity consumption.** Biomass alone represents 70% of the primary renewable energy consumption, but since its resources are limited, its relative share is bound to decrease. The second major issue concerns industrial emissions resulting from chemical reactions in the production of aluminium, cement, glass, etc. and from the combustion of fossil fuels. **Industrial emissions related to energy increased by 10.2% compared to the previous year, to reach 10.2MtCO₂eq. This increase is mainly attributable to the sectors of power plants, mineral oil treatment and the increase of demand in the other industries (+2.4%) (Statistik-BW 2018).**

• THE LOW DEMAND FOR ELECTRIC MOBILITY •

Standing at about 30%, transport still represents most of the GHG emissions in 2016. Made up of 94% of road transport emissions, the 1.3% increase of its emissions in 2016 is in particular due to **freight transport, whose emissions increased by 58.6% between 1990 and 2016. On the other hand, those of passenger transport (cars, buses, motorcycles) decreased by 4% and reached**

Baden-Wurttemberg - GHG Emissions (MtCO₂eq/an)



13.4MtCO₂eq in 2016, representing 57% of the emissions from road transport. The 27% decrease of specific emissions (quantity of CO₂ per travelled kilometre) of private cars was not sufficient to compensate for the increase of the annual mileage (+32.5% compared to 1990) and the resulting emissions. To that end, B-W has planned the electrification of the whole vehicle fleet by 2030 ([Goals 2030](#)). **In 2017, 1800 charging points were available in the region (1/6 of the national total) but electricity still accounts for only 1.5% of the total energy consumed by transport (emobil-sw 2018).**

• METHANE CAPTURE •

The waste management policy shows a 5.8% reduction of GHG emissions compared to 2016 and a 74.8% reduction compared to 1990, and they now account for only 1.4% of GHG emissions. The prohibition in Germany of landfilling untreated organic waste and the greater efficiency of methane capture from landfills have led to a significant reduction of methane emissions. The association of local authorities (Special Purpose Association) formed in the State of B-W for waste management is considered as an example in this respect ([GIZ 2016](#)).

MAIN SOURCE:
[HTTPS://UM.BADEN-WUERTTEMBERG.DE/DE/STARTSEITE/](https://um.baden-wuerttemberg.de/de/startseite/)