## EREIBURG IM BRISGAU

An action plan to renew ?

The city of Freiburg adopted its first "Klimaschutzkonzept" (climate action policy) in 1996 with a GHG reduction target of 25% in 2010 compared to 1992. Its implementation, mainly focusing on the building and transport sectors, has only enabled an 11.1% reduction of overall emissions but a 30% reduction per capita. There has been a relative stagnation since 2007 with 1.76MtCO<sub>2</sub>eq emitted in 2014. That same year however, the city council of Freiburg voted the targets of -50% emissions by 2030 compared to 2014 and carbon neutrality by 2050. To reinforce efforts at all levels, a new Klimaschutzkonzepts 2018 is under preparation, based on a consultation and citizen participation process for a one year period.

POPULATION

229,636 (2017)

SCOPE

## • SUPPORTING ON-SITE ENERGY PRODUCTION •

In 2014, 58.9% of GHG emissions were concentrated in the housing and services sectors, and 19.3% in industry. To become carbon neutral, Freiburg must reduce its energy consumption by half by 2050 and meet 95% of the remaining demand thanks to renewable energy. The most emblematic project is the transformation of the city hall completed in 2017 into an energy-plus house thanks to the combination of several technologies (EnergieWendeBauen 2018). The municipality is seeking to strongly develop the cogeneration of electricity and heat; an important tool for reducing GHG emissions in the city due to the proximity between production sites and consumption sites. The Klimaschutzkonzept provides for the installation of 3 to 4 units per year, making it possible to save 68,000tCO<sub>2</sub>eq each year compared to conventional heat supply (Gov freiburg 2017). Eight schools and a cultural centre are already supplied by these units.





Solar energy remains the main source favoured by Freiburg, which assesses its photovoltaic installation and production capacity at 860GWh, i.e. almost half of the canton's end-use electricity consumption. In 2015, 4% of the electricity consumed in Freiburg came from photovoltaic panels (PV). In May 2017, the city launched the campaign "your roof can do more", which aims at better informing the population and at promoting the installation of PV systems, and which enabled a saving of approximately 280tCO<sub>2</sub>eq. That same year, renewable energies made it possible to avoid a total of 38,000tCO<sub>2</sub>eq.

GHG TARGET -50% IN 2030;

NEUTRAL IN 2050

## • RAISING PUBLIC AWARENESS ABOUT ENERGY SOBRIETY AND SUSTAINABLE MOBILITY •

Households account for more than a quarter of the end-use energy consumption in Freiburg. In order to better exploit its potential for electricity savings, the city offers free advice. The 500 households advised represent potential energy savings of about 238tCO<sub>2</sub>eq per year. The "<u>Eco-energy Renovations</u>" programme furthermore encourages owners to carry out refurbishment works to improve their energy efficiency (amount of the contribution: €550,000 in 2018). Thus, more than 10% of the buildings in Freiburg were subsidised for the whole duration of the programme.

The share of transport in GHG emissions is low (22% in 2014) but has remained at a constant level in recent years. Yet, car journeys accounted for only 21% of travels in 2016, and several recent projects should reduce this figure: underground extension in 2013 and 2015, 420 km of bicycle lanes in 2017 (EcoMobility Freibourg). At the end of 2018, following the success of the first flywheel power storage system of 2014, a second one will be integrated into the tramway network, which will make it possible to return the energy stored through its rotation in other needs (<u>Reporterre 2018</u>).

MAIN SOURCES: <u>FREIBURG IM BRISGAU (EN)</u> <u>MONITORING REPORT 2017 (DE)</u>