Golden-brown croissants in the oven. Photo: JOWA LTD.

In the regional JOWA bakery in Ecublens, large quantities of waste heat are generated by baking and cooling processes. Previously, only a small amount of the waste heat was used for heating the building and producing hot water. Through the expansion and optimisation of waste heat utilisation, this carbon offset project is reducing the consumption of fossil fuels for the production of warm water.

JOWA in Ecublens produces bread and various baked goods, primarily for the Migros cooperatives in western Switzerland. Most of the heat for heating and warm water was generated by an oil boiler in the past. The remaining heating requirements were partially covered by waste heat produced by the baking (natural gas-powered) and cooling processes. From an economic perspective, making changes to the current heating system before the end of the useful life of the oil boiler make little sense. The burning of fossil fuels such as heating oil and natural gas results in CO₂ emissions, which are detrimental to the climate.

The best energy is that which goes unused. JOWA has set itself the target of reducing heat consumption and CO₂ emissions by around 10% by 2020. Our Ecublens site (VD) is achieving this goal by optimising the use of waste heat!

Aloisia Predota, Head of Sustainability, JOWA LTD.

In this project, the existing utilisation of waste heat is being expanded and previously unused waste heat generated by the cooling process, and by newly implemented compressed air production, is being integrated into the heating distribution system. The necessary technical components such as heat exchanger, water tanks, pumps and the corresponding regulation are being subsidised via a one-off investment contribution from the “my M
climate" fund. The newly accessible waste heat will replace around 80 per cent of the heat previously produced using fossil fuel. Thanks to these measures the CO₂ emissions resulting from heating the building and generating warm water will be reduced. The resulting emissions reductions will be credited to the "my M climate" fund from 2021 until 2030.