

# villach

**kelag**  
Energie & Wärme

## Villach is a green district heating city

Already in 2014, the **seventh largest city in Austria** received a Europe-wide award for its commitment to environmental protection. In 1992, Kelag acquired the local district heating system and in the course of the decades developed it into a so-called **multi-supply system**. This means that **all energy sources available in the region are intelligently cross-linked**. From 2008 to 2018 alone, district heating sales doubled.

Today, KELAG Energie & Wärme GmbH supplies almost **1,000 buildings, many businesses and around 13,000 households** with its largest network. In order for this enormous expansion to be sustainable and environmentally friendly, many different sources of heat are used: In addition to **waste heat from industry and a green power plant, landfill gas, biomass and solar energy** are used. Natural gas boilers are still available as a reserve only for bottlenecks with peak consumption.

The diversification of heat production in Villach continues: Since fall 2018, around 100 million kWh of **waste heat from the waste incineration plant** of Kärntner Restmüllverwertungs GmbH (KRV) in Arnoldstein has been fed into the Villach district heating system. For this purpose, KELAG Energie & Wärme GmbH has relocated a 17 km long district heat network from Arnoldstein to Villach-Warmbad. The KRV will provide less electricity in the future, but more heat. "With this concept, we can more than double the fuel efficiency of our plant, from currently 24% to 51% in the future", explains Adolf Melcher, managing director of Kelag Energie&Wärme GmbH. The heat supply in the southwest of the city of Villach and the ring connection also improve the security of our customers' supply in Villach.

The **100 million kWh of heat delivered annually** means that from the heating season 2018/19, half of Villach's heat sales will be generated by waste heat from the Arnoldstein waste incineration plant. This not only enables further growth in the future, but also further increases the renewable share of Villach district heating, and other sources of energy can be replaced. "With the waste heat from Arnoldstein, the proportion of green heat in our system in Villach is growing to around 85%. Our **customers want green heat**, which has contributed significantly to our previous growth in Villach", says Adolf Melcher. **Villach is a prime example of how much flexibility and green potential in district heating is.**

### **KELAG Energie&Wärme GmbH \***

Head office: Villach

Employees: approx. 240

Biomass heating plants: 27

DH-systems: 83 in Austria

Network length: 820 km

Central heat stations: approx. 900

Goal: 66 % renewable heat until 2023