

# Belgium: Heat Pump Market Report

Heat Pump Platform steering group, Belgium

Belgium has been a relatively slow mover in the installation of heat pumps in the first decades of this century. In new buildings, the adoption of heat pump technologies increased at a nice speed. Also, many exemplary and eye-catching public buildings were constructed with four heat pumps to provide comfort. Research keeps a nice focus on hot spots that make a difference. In the past 4 turbulent years, however, we have witnessed ups and downs in the sector. Staying on a dedicated and robust path has always been a challenge in this small European country, so the platform is really lacking quiet moments.

<https://doi.org/10.23697/9r3s-rh73>

The introduction and diffusion of heat pumps for space heating in Belgium coincided with the introduction of energy-efficient buildings in 2006. Lowering the heat demand step by step due to the integration of the regional approach of European EPBD legislation made the conditions for heat pumps better and better in the newly built domestic market.

The total sales volume of heat pumps (air to water, water to water and domestic hot water heat pumps) during the first semester of 2023 is 46.583 units. This is an increase of 140% compared to 2022 (thus resulting in 240 % compared to the previous year).

In the domestic market, heat pumps are mainly used for space heating. Domestic hot water heaters still have a strong increase of 140%, mainly due to the exchange of electrical boilers. But sales are decreasing, if we look at the same period a year earlier the increase factor was 236%.

We conclude that the energy crisis and the resulting low electricity/gas price ratio are important drivers for these very positive sales of heat pumps. Generally speaking, this price ratio in Belgium has always been situated around 4-5, which is very high compared to other countries, making it nearly impossible to have a final cost benefit. The tax shift from electricity to gas, the solution for this paradox, was on the political agenda for years, but it remained an unsolvable wicked problem, it seemed.

With the Ukraine conflict, the tax component and its influence on the end user price decreased sharply, and at one point in September 2022, the price ratio was reduced to 2.7, which was the lowest level ever. This heavily influenced the market demand. In August 2023, this ratio is back up to 4.3, which seems to be reflected in a lower sales increase (but still an increase) of 94% in July and 41% in August 2023.

## Sales of heat pumps in Belgium

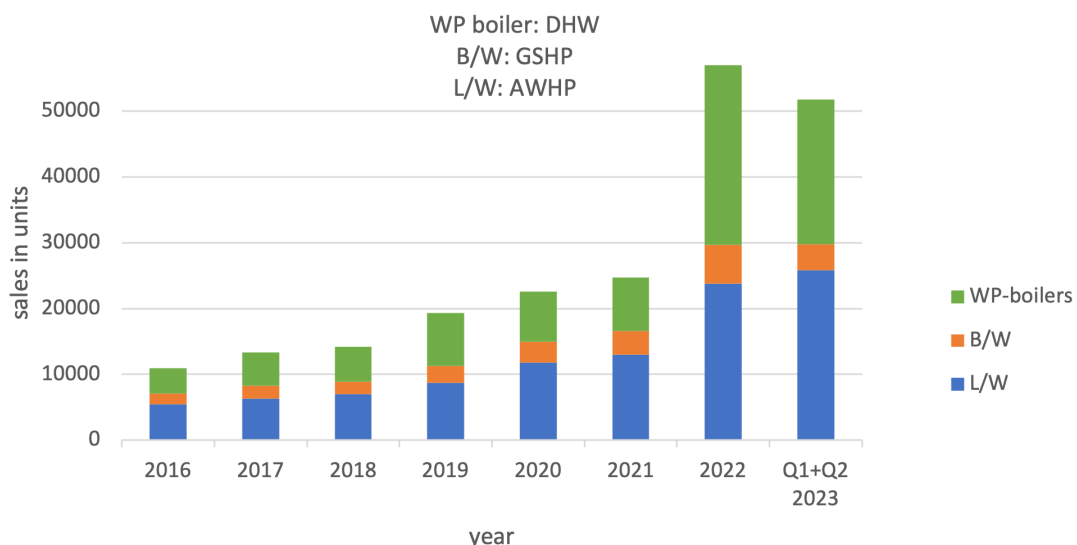
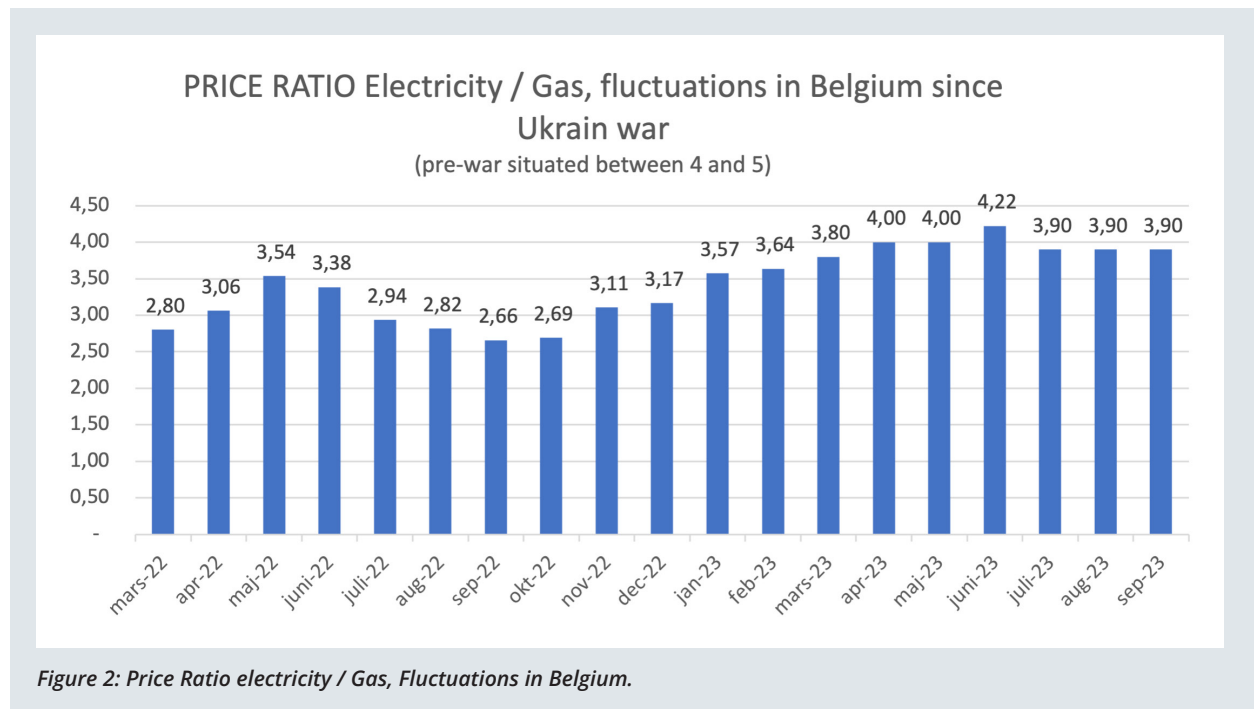


Figure 1: Sales of heat pumps in Belgium.



These are the first signs of a market slowing down due to, among others, high-interest rates, unstable energy prices and investment scariness of our population.

On a regional level, we also see positive integration of policy. Some examples are the ban on gas connections for new multi-family buildings in 2022, the drop of public grants on the connection on the gas networks for new buildings, the interdiction of oil boilers in new buildings or exchange and in 2025, the restriction to gas grid connection in new build individual houses.

At this moment, it's unclear if VAT taxation on demolition and reconstruction of buildings and heat pumps stays at 6% or will increase to 21% again. These temporary measures are drivers in sales but also create stop-go moves due to the temporary character.

For a healthy and steady development of sales, we need a stable overall policy. A clear roadmap avoids market fluctuations and associated stop-go moves that result in delayed transition and economic challenges.

The focus of academic research has shifted to industrial high-temperature applications, integration in larger systems and system integration, clean (fossil-free) hybrid solutions and advanced control and design of larger systems.

We are hopeful that policy makers will succeed in creating a path with a stable policy and an important tax shift (from electricity to fossil fuels). This will be the major game changer towards further reductions of CO<sub>2</sub> emissions for heating. Together with innovative products and system integration, and thus collaboration between different stakeholders of the heat pump industry and carbon-free technologies, Belgium could still walk the talk towards 2050.

The outlook seems therefore positive, as plans on city levels to heat buildings are considering two solutions: either individual heat pumps or thermal grids. Knowing that large industrial heat pumps will be an important supplier of the grid option as well this gives the technology a sunny long term view.

Meet us in  
social media

