



Elfriede Schädler (right) in her kitchen with granddaughter Stefanie.

"My house is fit for the future. Let the winter come. Let the winter come."

Elfriede Schädler, Homeowner Ravensburg, Germany

The situation

In 1986, Elfriede Schädler and her husband built a 1-story house in a quiet neighbourhood of Ravensburg, Germany. Nearly 40 years later, Mrs. Schädler was now widowed, but she still lived in this home. And in the winter of 2022, she was cold.

"The heating didn't work well anymore. Sometimes I was freezing. And there was no warm water," Mrs. Schädler says. She asked her granddaughter, Stefanie, for help.

Stefanie Schädler is a project manager at Wagner Bad und Heizung, a plumbing and heating supplier and installer in Ravensburg. Stefanie and her grandmother sit in Mrs. Schädler's kitchen. Stefanie says: "We weren't sure whether the heating could handle the next winter. So, we were considering our options. Should we try to fix her old heating system? Or would she like to invest money for a new one?

"The costs were a factor," continues Stefanie.

"A thermal heat pump would be a great option, but with heating, it's important that the cost-benefit balance is right."

That is why, in the end, they chose to install a new, condensing heating technology gas system.

Marco Wager – who co-manages the Wagner store with his father – says the new system uses "significantly less gas than Mrs. Schädler's old heating system. And it's supported by a completely new system configuration with new Grundfos pumps. We installed a new drinking water reservoir and built a new hydraulic heating system. This way, we were able to build a good and sustainable system for Mrs. Schädler."



"Grundfos gives us an advantage in hydraulic balancing [...] in real time with an app."

Christof Marschall, Heating and ventilation engineer WAGNER Bad und Heizung

The solution

Christof Marschall, a heating and ventilation engineer at WAGNER, installed the new system in Mrs. Schädler's home. "Grundfos products are easy to install. They're easy to use, thanks to a user-friendly display," he says.

For the floor heating and radiators, Christof used Grundfos ALPHA 2 circulator pumps for precise control and energy-efficient distribution of heat in each room with the AUTOADAPT digital technology. Grundfos ALPHA 1 pumps optimize the hot water circulation, maintaining a constant supply of hot water while minimizing energy consumption. And a Grundfos COMFORT pump ensures the efficient circulation of hot water, providing instant access to warm water at the tap, reducing water wastage.

Marco Wagner is grandson of the original owner of the family-owned business in its current form, as WAGNER Bad und Heizung in Ravensburg, Germany. He co-manages with his father.



"When you compare today's pumps with the pumps of the past, we're using about one-fifth as much energy as 10–15-year-old pumps did."

Marco Wagner, Manager WAGNER Bad und Heizung

In addition, Christof connected an ALPHA Reader unit to the system, which sent the current operating parameters to his smartphone via the Grundfos GO app.

"Grundfos gives us an advantage in hydraulic balancing, which is prescribed by law. We can do it in real time with an app on your phone. And then we can print out a report afterwards – which the homeowner can use if they apply for a government energy-saving grant." Marco says Mrs. Schädler's is a good example of a standard heating system replacement in Germany. In other words: an old gas heating system in a single-family home is replaced by a newer, much more efficient gas system. "Of course, control technology has come a long way. We were able to adjust the control and comfort of the system to fit Mrs. Schädler's situation."

He adds that the WAGNER group has installed Grundfos pump solutions exclusively for

many years now. "My grandpa started that," he says. "Grundfos products are durable and reliable. And Grundfos puts a lot of effort into sustainability with their energy-saving pumps. They make a great contribution to the energy transition."

He continues: "Because when you compare today's pumps with the pumps of the past, we're probably using about one-fifth as much energy as 10–15-year-old pumps did.

Taken on a Germany-wide or even global

scale, a very small and simple change can have a great effect when it comes to our energy supply and energy politics."

Marco says, "We have the chance with small interventions to make a contribution without having to make a big intervention. If we take such small measures on a global scale, we can counter big climate problems."



Sources. The facts and quotes in this story come from interviews on site at Elfriede Schädler's home and WAGNER Bad und Heizung in Ravensburg, Germany, 10-11 October 2023.

"We use less gas. That's important to me – the cost-efficiency."

Elfriede Schädler, Homeowner Ravensburg, Germany

The outcome

Mrs. Schädler says after a half year, there is a noticeable difference with the new gas system. "We use less gas. That's important to me – the cost-efficiency. Especially considering the gas prices. Gas is a lot more expensive now. So it helps to cope with that. And everything works well again."



Heating engineer Christof Marschall collecting installation parts and supplies at the WAGNER Bad und Heizung warehouse.

The house is now ready for the future, she says, adding, "I'm happy to have a new heating system now that works. I'm glad it's warm again, like it should be. Let the winter come. Let the winter come. I am ready."

Grundfos supplied

WAGNER Bad und Heizung used three types of pumps from Grundfos for the heating system upgrade at Elfriede Schädler's home in Ravensburg, Germany: two Grundfos ALPHA 2 pumps for the floor heating and radiators, one ALPHA 1 pump for the hot water, and a COMFORT 15 pump for the hot water circulation. Read more about Grundfos Domestic Building Solutions.

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