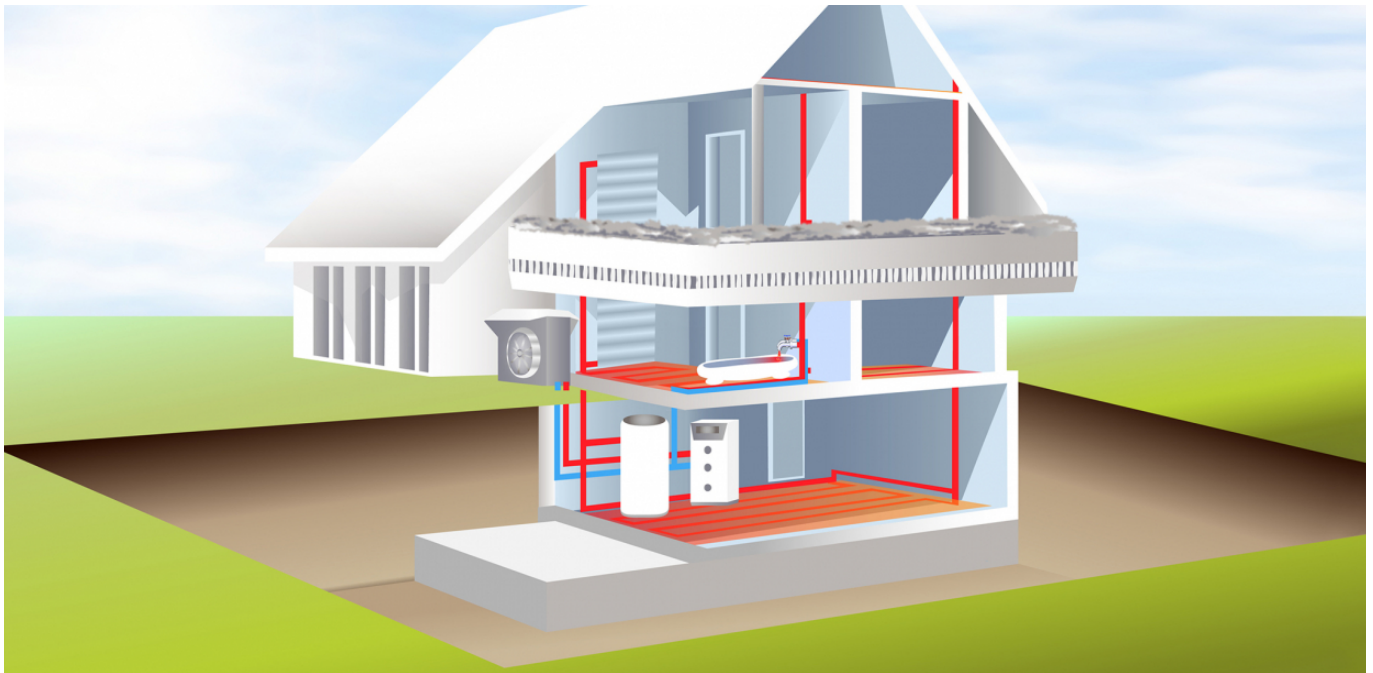


Air-to-water heat pumps: prices and quality in Switzerland



Heat pumps figure prominently in Switzerland's current energy strategy. However, the cost and efficiency of these compared to competing technologies can be expected to play a significant role in their ultimate acceptance and widespread use. In light of this fact, the Swiss Federal Office of Energy (SFOE) commissioned EBP to carry out a study of the cost and quality of air-to-water heat pump systems.

In the context of the study, EBP asked various Swiss installation companies to submit a quotation for replacing an existing oil heating system in a reference building with either an air-to-water heat pump system or a new oil heating system. Half of the installation companies were asked to base their offers on a heat pump system meeting specific quality criteria, while the remainder were not given any particular quality specifications. The study design led to some surprising results.

Pricing: As expected, the cost of installing a heat pump was significantly higher than that of a new oil heating system. However, a comparison of the total annual costs of the respective systems revealed that the heat pump systems often demonstrated savings over the oil heating systems.

Quality: The explicit request for quotations based on specific quality criteria had no impact on the quality of the systems offered. This suggests that many installation companies are intent on offering their preferred standard models, i.e. irrespective of the specific wishes of their prospective customers. Indeed, it became necessary to repeatedly request the installation companies to revise their offers to account for

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the specified quality. This puts the onus on customers to check the quality being offered and insist on adherence to the specifications in order to ensure the submission of quotations based on the desired quality.

Pricing-quality ratio: On average, the cost of the heat pump systems meeting the specified good quality was less than that of the systems offered in the absence of a quality specification. One possible explanation for this is that precise system specifications indicate to an installation company that the required system is definitive and that reserve surcharges are not so necessary. Another explanation is that an installer may assume that those who place such specific orders are knowledgeable in the field, which can have the effect of additional price pressure.