

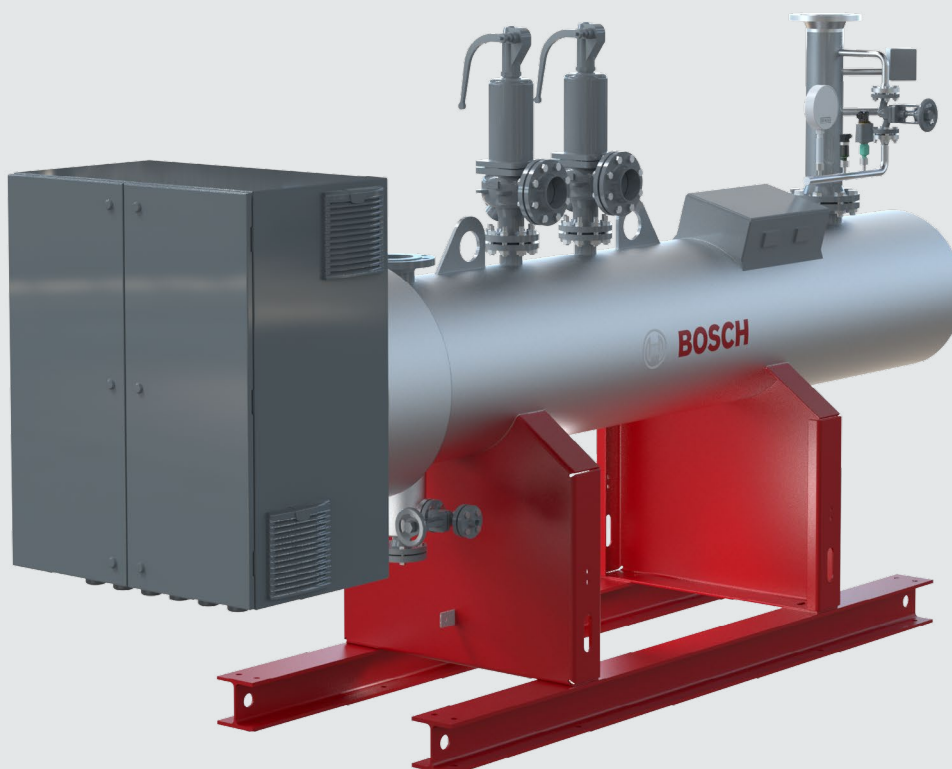
# Bosch electric boiler for heating and hot water ELHB

The electric boiler ELHB for low voltage generates hot water and heating energy with outputs of up to 5.5 MW per appliance at up to 16 bar. A versatile power-to-heat solution from Bosch for local and district heating, building heating, process heat or as redundancy for other energy generators.

- ▶ **Generating heat 100% electrically – without any flue gas**
- ▶ **Reducing CO<sub>2</sub> emissions: Using surplus power from photovoltaics, hydropower and wind power**
- ▶ **Electric heat system from a single source and simple system integration**
- ▶ **Fast availability of heat and flexible control behaviour for demand-based supply**
- ▶ **Made in Germany: Excellent quality and safety standards from Bosch**
- ▶ **Increase system availability and operational safety with reliable technology**
- ▶ **Your customised electric heat solution and services from Bosch**

## Technical data

Heat transfer medium	<b>Hot water</b>
Output	<b>from 250 up to 5,500 kW</b>
Energy source	<b>Electricity (380/400/690 V)</b>
Max. safety pressure	<b>up to 16 bar</b>
Max. temperature	<b>up to 190 °C</b>
Max. efficiency	<b>up to 99.6 %</b>



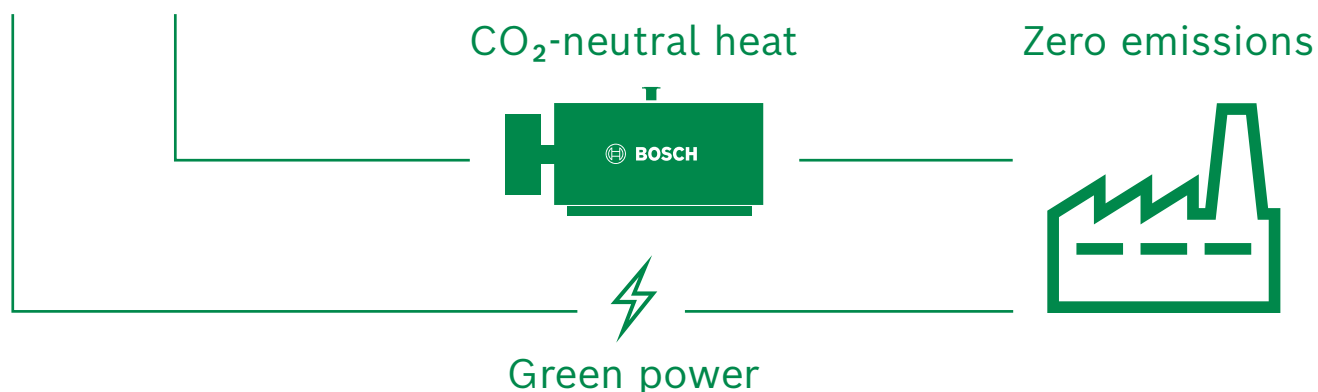
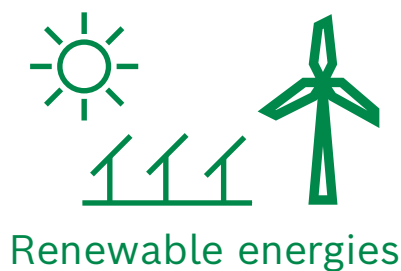
# Generate heating and process heat with green electricity

## Generating heat 100% electrically – without any flue gas

**No flue gas emissions** are generated when producing heat electrically with the ELHB. If green energy is used, you benefit from a greatly **improved CO<sub>2</sub> balance**. **Renewable energy** from the sun, wind or water can be perfectly combined with the electric boiler by Bosch. This provides the basis for decarbonising heating energy and process heat at your site.

## Reducing CO<sub>2</sub> emissions: Using surplus power from photovoltaics, hydropower and wind power

The electric boiler system can utilise locally generated **surplus electricity** with an intelligent control system from Bosch. This reduces the need to purchase other energy sources and the amount of fossil fuels used. Based on the **power-to-heat principle**, the ELHB is extremely efficient at converting the energy used into heat and achieves an efficiency of **up to 99.6%**.



# The Bosch electric boiler system offers flexibility, operational safety and reliability

The electric boiler system by Bosch can be **seamlessly integrated into your existing infrastructure**. As a standalone electric solution, in a cascade or as a multivalent system combined with existing heat generators. **You get a system** consisting of a boiler with a heating bundle, power cabinet and control system. The absence of any flue gas equipment saves you time and costs.



## Very high system availability

The ELHB boasts an extremely **long-lasting heating bundle** with additional heating coils. Flow rate and flow temperature are maintained at all times, ensuring **optimum operating conditions** at every operating point. The combination of power cabinet, intelligent control system and system-specific parametrisation **protects against unwanted backcoupling** into the power grid.



## Made in Germany

The electric boiler system ELHB features **state-of-the-art safety equipment** in its hydraulics, mechanics and control system. The boiler shell is designed, produced and tested according to **PED or EN standards** at the Bosch factory in Germany. TÜV Süd, an independent monitoring association, **continuously monitors quality** during manufacturing on site at our production facilities.

## Fast and flexible heat availability

The electric boiler **is ready** for operation from cold start and standby **in next to no time**, which is especially useful for covering peak loads. It operates **fully automatically** and the flow temperature is continuously controlled. The thyristor switching, which has an infinitely variable modulation range from 0 to 100%, enables **individual adjustment to the heat requirement** or available surplus electricity.



## Your customised electric heat solution

We work together to adapt your electric boiler system **to your processes and on-site requirements**. This includes hardware, boiler control, remote options, customer-specific functions and interfaces with the automation system provided by the customer. Our Bosch industry experts are on hand to provide you with **service support**, such as commissioning and maintenance.



Electric heat  
solution needed?  
**We configure yours.**



Your Bosch  
Industrial Heat  
expert

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