

Electricity and heating





Get your very own energy transition started

Electricity and energy consumption play a considerable role in our everyday carbon footprint. The more consumers switch over to green power, the faster the proportion of renewable energies in Germany's electricity mix will grow – and it will also improve your personal climate footprint in a quick and decisive way. The production of conventional electricity was responsible for an average 489 grams of carbon

per kilowatt hour (kWh) (in 2017). Energy from wind power only produced 16 grams of carbon, water, about 30 grams and solar power, about 63 grams. Simple measures can help to lower energy and electricity costs in our household.

OPT FOR GREEN POWER

Green power doesn't have to be more expensive – it's about finding the right rate. It can even be cheaper if you've been getting your electricity from the more expensive local provider: A four-person household will save an average of 360 euros per year by switching from their local electricity company to a certified green electricity provider or one that demonstrably makes significant investments in local green electricity production. You can switch providers quickly and easily online or by mail – the rest is done for you by your provider. And you don't need to worry about a supply gap. Your local provider, typically your municipal utilities company, is legally obliged to continue delivering electricity to you at all times.

MAKE SURE IT'S 100 PERCENT GREEN

Some providers sell electricity under the "green" label even though only 50 percent of it is generated from wind, water, solar power or biomass. Others obtain their power only from old hydroelectric power plants, without investing in renewable energy plants. Yet we need more wind turbines, solar power plants and the like in order to drive Germany's energy transition forward.

SAVE ELECTRICITY THROUGH LIGHTING

Some 10 percent of all electricity costs in a household arise from lighting. By choosing energy-efficient

lamps, you can effectively lower your electricity costs. LED lamps are typically the most efficient illuminants. They're available in different forms, both for targeted lighting as well as for the general lighting of rooms, and can save you upwards of 85 percent on electricity costs as compared to conventional light bulbs. Make sure to switch off the light in any room you're not currently using. Energy-saving bulbs cut costs by up to 70 percent as compared to old light



bulbs. When buying new illuminants, make sure to check for the important detail of their expected operating life.

HEATING THE RIGHT WAY

Around 70 percent of a household's energy consumption goes for heating. Windows are not just where heat gets lost – they're also where additional solar radiation is allowed in. At night, you should use shutters, blinds and thick curtains to seal off the windows as tightly as possible. This cuts down by some 20 percent on the amount of heating that gets lost through windows. Radiators should not be covered, however, as warm air is then unable to spread throughout the room. How you air your rooms is important, too. Instead of keeping your window open a crack all the time, you should go for short and intense bouts of airing. This ensures a complete exchange of air and saves you extra heating power.

LOWER YOUR ROOM TEMPERATURE

When it comes to energy consumption, just one degree Celsius in room temperature makes a huge difference. By lowering the temperature by one degree, you save about six percent in heating energy. During the day, it's usually sufficient to keep your living space at 20 to 22 degrees Celsius – and 17 to 18 degrees will do in your kitchen and bedroom. To prevent mold from forming, however, you shouldn't go any lower than that. At night you can turn down the heat. However, the nighttime temperature should only differ by a maximum of four to five percent from the daytime temperature, because otherwise a disproportionate amount of energy will be needed to reheat your rooms in the morning.

ADJUST THE TEMPERATURE CORRECTLY



Most heating systems are equipped with a standard thermostat attached to the radiator itself. Make sure not to turn the thermostat to maximum heat. This won't heat up the room any more quickly – it simply regulates the maximum temperature

at which the system will stop heating. For instance, stage three on the radiator dial equals around 20 degrees. Small programmable thermostats regulate the room temperature in a particularly effective way. Smart thermostats, on the other hand, aren't necessarily sustainable, because in practice, they don't always meet the savings potentials they promise.

ENERGY-SAVING DEVICES

When buying a device, make sure to opt for an energy-efficient product. It's best to completely turn off TV sets, computers, and the like when they're not being used. Older models in particular waste a lot of energy when they remain in standby mode.

HIDDEN ENERGY CONSUMPTION

Some types of energy consumption may not be obvious: For instance, every online search you carry out consumes electricity, even though we don't see it. Behind this kind of consumption are countless computer centers and server farms along with the respective infrastructure which supplies the internet with energy. When this energy comes from fossil fuels, greenhouse gases are emitted. "Greener" alternatives to conventional search engines include Ecosia, gexsi, Goodsearch or Treehoo.

LOOK FOR THESE SEALS

The **Grüner Strom** and **ok Power** seals distinguish electricity generated from 100 percent renewable energies. They impose strict criteria of environmental friendliness on power plants.





The sustainable shopping basket

Check out www.nachhaltiger-warenkorb.de for important information about sustainable consumption as well as independent information about the various seals and product labels. You'll find information about food, travel and mobility, living and building, housekeeping and electronics, as well as fashion and cosmetics.

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