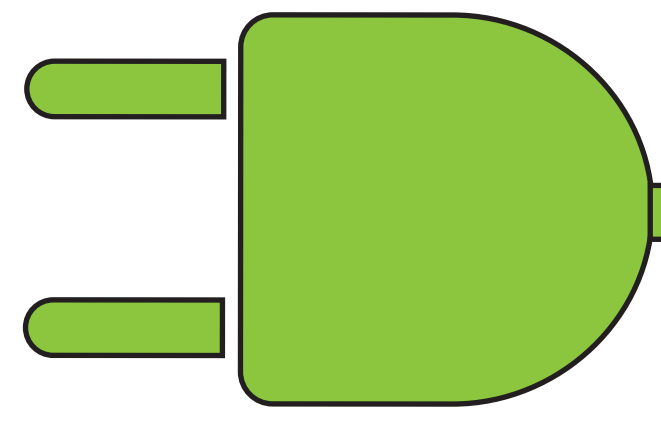
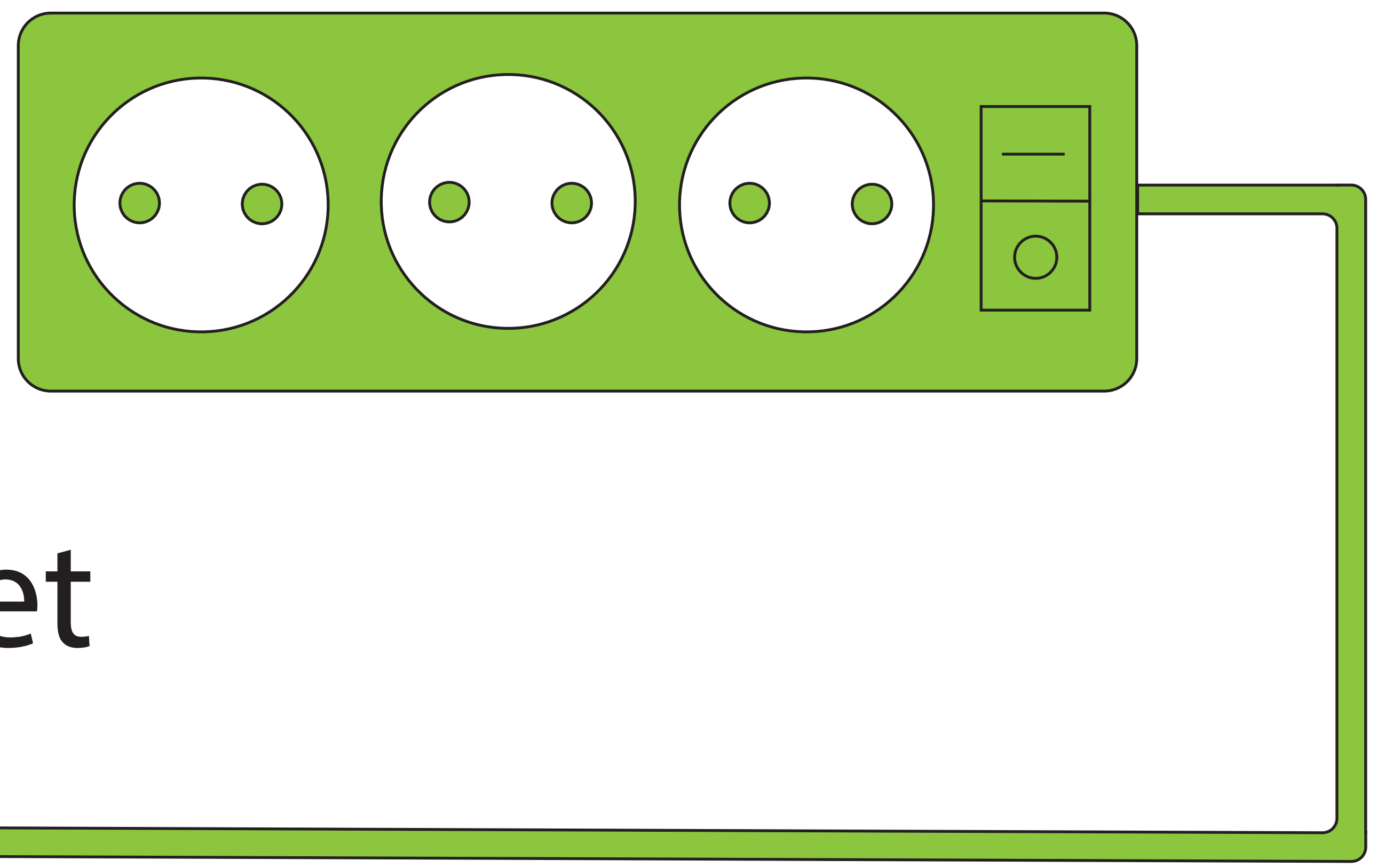


Electricity

We feel the high consumption in our wallet



3 %

Electricity consumption in the household

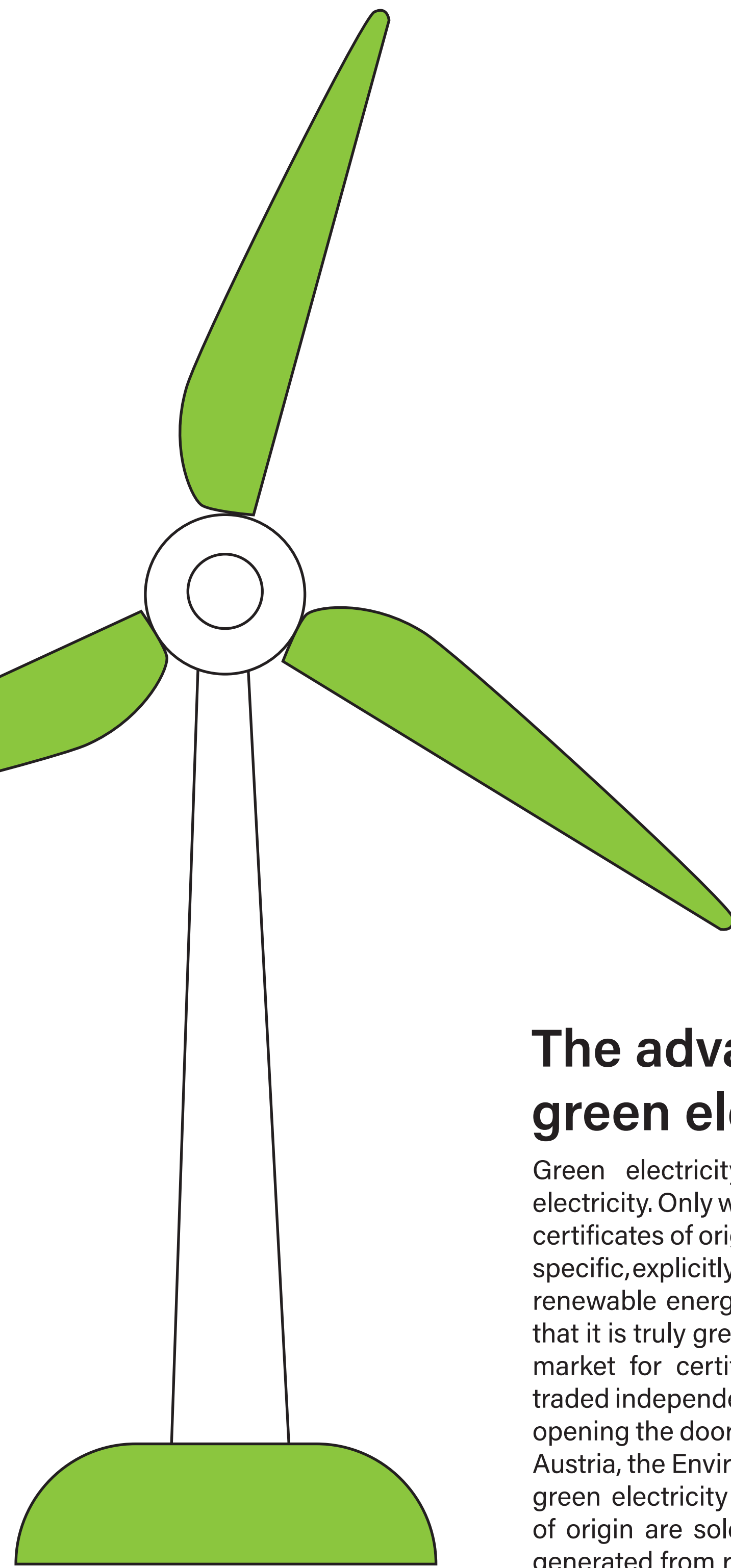
CO2 footprint

With 3%, the direct electricity consumption in households plays only a minor role in our CO2 footprint.¹ This is partly due to the high share of renewable energy sources (78.2% in 2020) in the Austrian electricity mix.² However, the production of products and the provision of services that we consume daily also require electricity.

78,2 %

Renewable energy

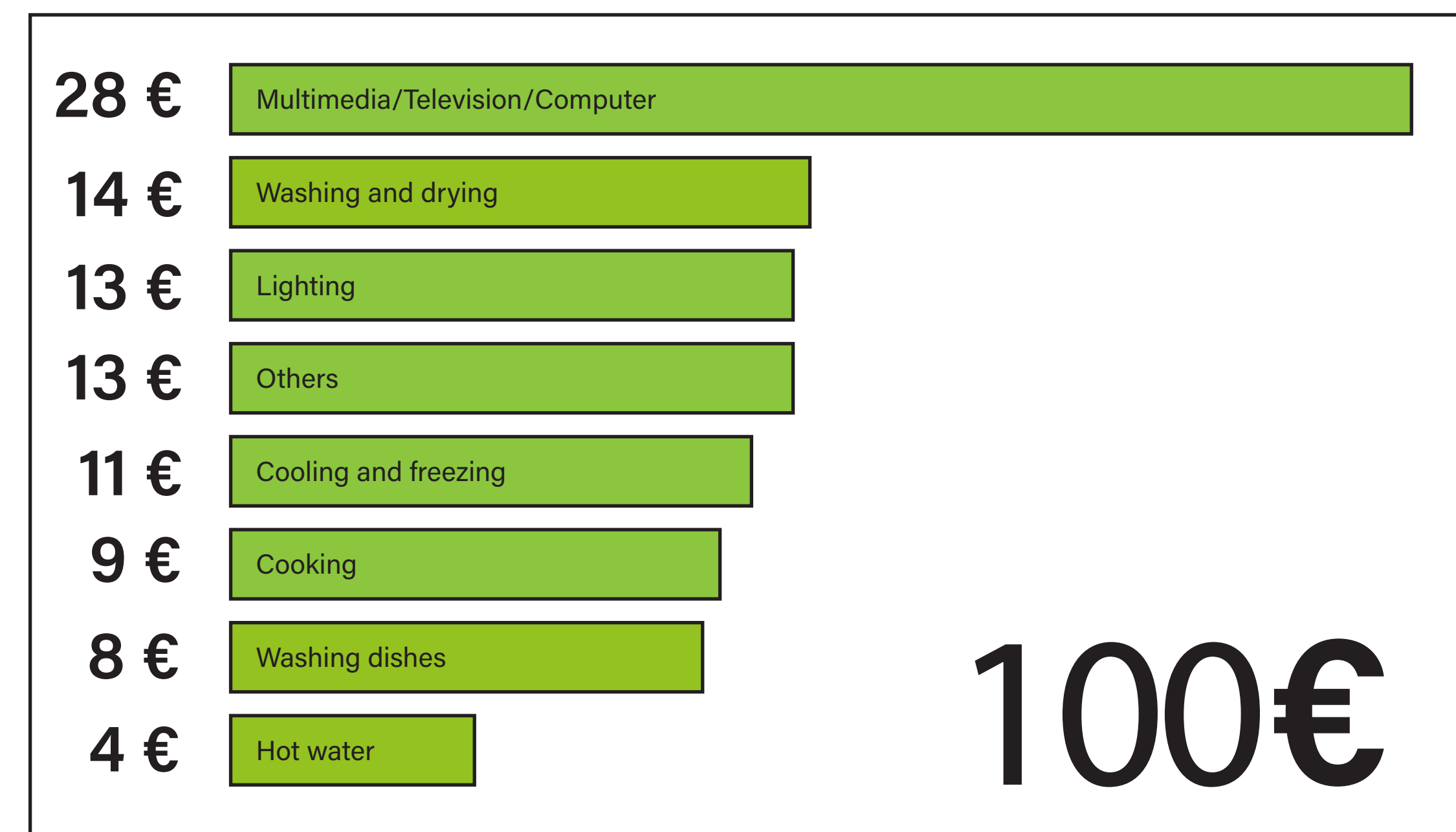
Electricity demand has increased by half since 1990³ and will continue to rise in the coming years without appropriate countermeasures.⁴ Reasons for this include the electrification of road transport and entire industrial sectors, as well as ongoing digitalization, although smart technologies can also contribute to the reduction of greenhouse gases.⁵ Reducing electricity consumption and avoiding unnecessary purchases helps to lower production demand, greenhouse gas emissions, and costs.



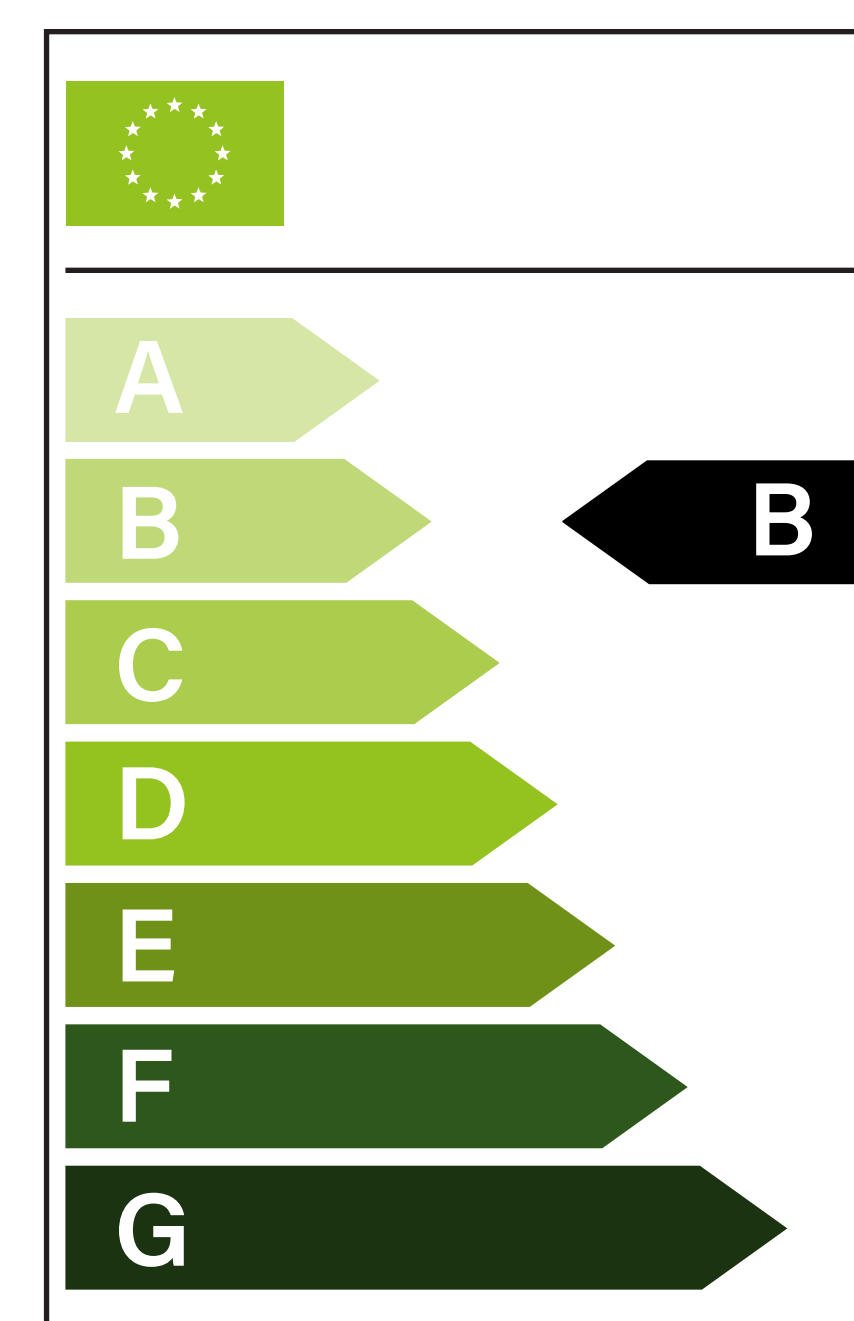
The advantage of real green electricity

Green electricity is not the same as green electricity. Only when it is purchased together with certificates of origin that prove it was generated in specific, explicitly named production facilities using renewable energy sources, can it be guaranteed that it is truly green electricity. There is a separate market for certificates of origin, which can be traded independently of electricity quantities, thus opening the door to greenwashing in electricity. In Austria, the Environmental Label (UZ) 46-certified green electricity guarantees that the certificates of origin are sold 100% together with electricity generated from renewable sources.⁶

Of the 100 € electricity costs, ...



Pic. 1

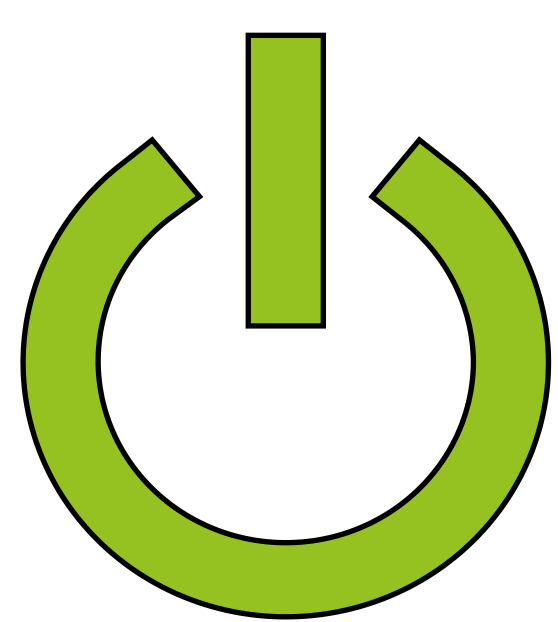


Pic. 2

Energy efficiency classes

Those still owning devices with A++ or A+++ labels should not be surprised. Since 2021, there has been an updated labeling system. The A rating has not yet been assigned in the new system to encourage manufacturers to produce more efficient products.⁷ The label also includes additional information that varies by device, such as noise levels, time settings, resource requirements (e.g., water), and storage space (weight, volume).

How to save electricity?



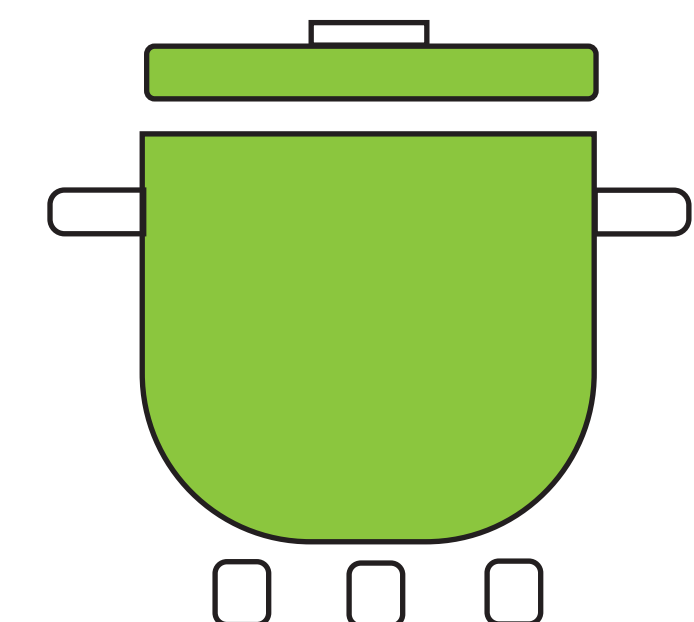
Standby - hidden costs

Essentially, the electricity bill depends on consumption. This increases both with the total number of devices and how long they are in operation. Around 4% of household electricity demand is typically attributed to the standby mode of devices.⁸



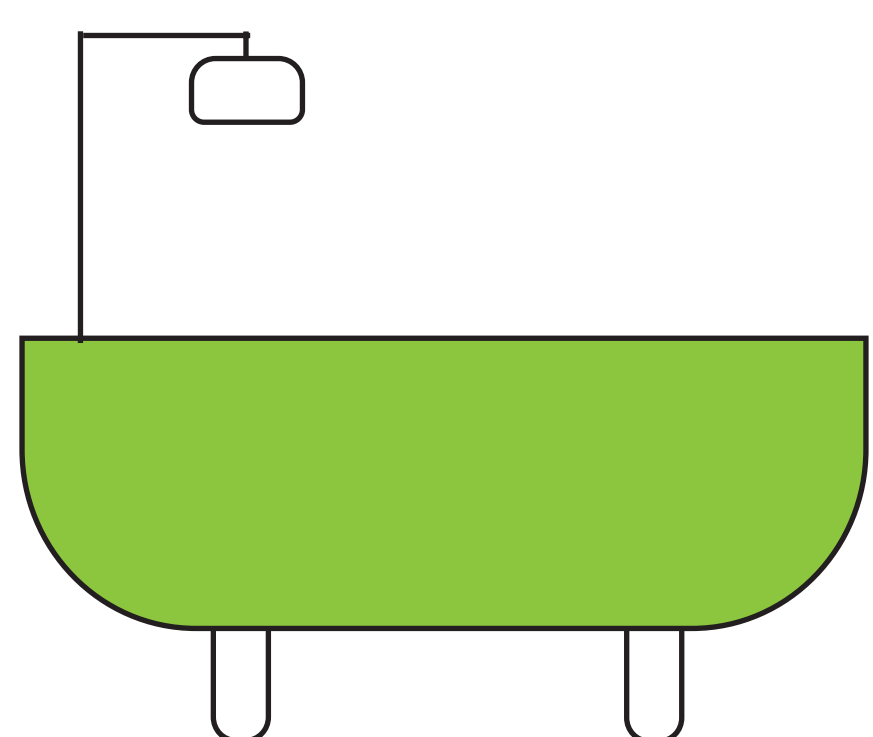
Quality pays off

Investing in quality – slightly more expensive, but longer-lasting products – saves costs in the long run.⁹ Purchasing energy-efficient new devices also reduces the electricity bill.¹⁰



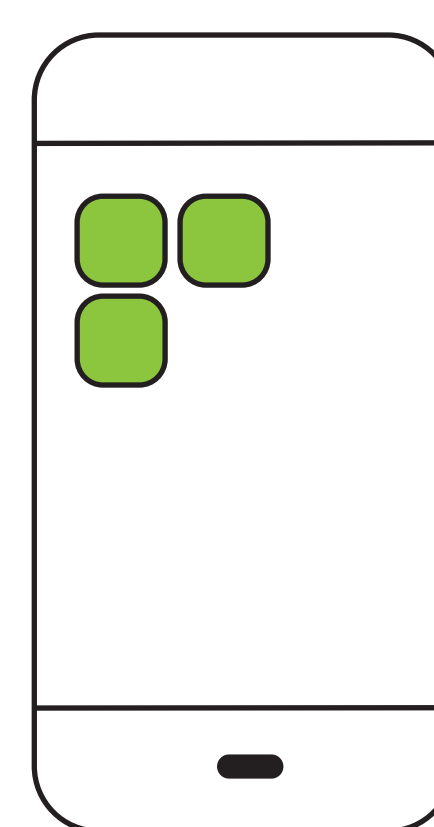
Cooking with a lid

An open pot is like an uninsulated house – a lot of energy is lost. With a lid on, we also need less time to heat something.



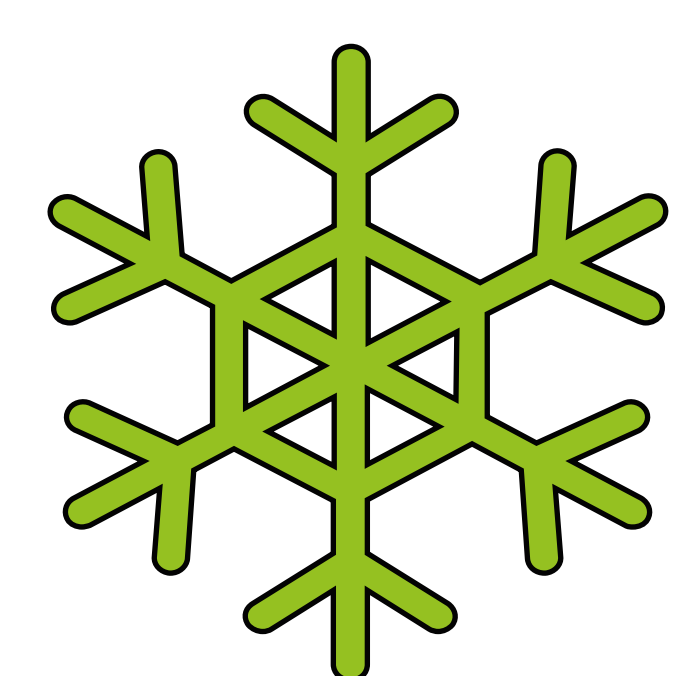
Not for hot water lovers

Heating or keeping water warm requires a lot of energy: smaller amounts of water and lower heat demand when bathing, showering, and washing laundry.



Smart electricity saving

Those who want to go a step further can use smart devices or apps to schedule appliances like washing machines or dishwashers to run at times when there is surplus electricity in the grid (typically in the afternoon). This also helps relieve the electricity grid by reducing consumption peaks.



Cooling without technology

The purchase of an air conditioner can be avoided by darkening the apartment during the day and limiting ventilation to the morning and night.¹¹

¹ vgl. mein-fussabdruck.at, 2023
² vgl. BMK, 2022b, S. 24
³ vgl. Statistik Austria, 2023a, Register Elektrische Energie
⁴ vgl. UBA, 2020, S. 8

⁵ vgl. AEA, 2022, S. 18
⁶ vgl. UBA, 2021c, S. 2ff.
⁷ vgl. Europäische Kommission, o.J.
⁸ vgl. Energie Steiermark, 2022a, S. 35
⁹ vgl. Öko-Institut, 2020, S. 11

¹⁰ siehe Beispiele in Energie Steiermark, 2022a und 2022b, und Land Steiermark, 2022b
¹¹ siehe Beispiele in Energie Steiermark, 2022a und 2022b, und Land Steiermark, 2022b

Pic. 1: Eigene Darstellung basierend auf Energie Steiermark, 2022a, S. 5
Pic. 2: Eigene Darstellung basierend auf Europäische Kommission, o.J.