

# Project *brief*

Thünen Institute of Forestry

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## Wood energy consumption in private households

Dominik Jochem<sup>1</sup>, Christian Morland<sup>1</sup>, Sebastian Glasenapp<sup>1</sup>, Holger Weimar<sup>1</sup>

- **10,000 private households in Germany provided information as part of a survey**
- **In 2020, 26.95 million m<sup>3</sup> of fuelwood were used in private households**
- **Fuelwood was used for heating in 5.5 million households**

### Background and objectives

In order to be able to monitor the development and classify the relevance of renewable energies in Germany, it is necessary to have quality-assessed data on the use of solid biofuels in all relevant energy sectors. For the largest energy use sector of wood, the private households, official data are missing, so that regular household surveys are necessary to close this data gap.

### Methodological approach

For the assessment of the fuelwood consumption in private households in 2020, approximately 10,000 households in Germany provided information in a representative survey. Based on this sample, the fuelwood consumption was extrapolated for all households in Germany. The existing time series was updated up to the year 2020 on the basis of the survey results for the year 2020 as well as survey results on fuelwood consumption in private households for the years 2005, 2010, 2014 and 2018 as part of the "Wood Resource Monitoring".

### Results

A key finding of this study is that a total of 5.5 million households used fuelwood assortments for heating in 2020. 1.08 million households (about one in five households heated with wood) used wood-fired central heating systems. The remaining 4.4 million households heated with fuelwood did not have a wood-fired central heating system, but one or more single-room furnaces.



Source: Dominik Jochem

In total, 26.95 million m<sup>3</sup> of fuelwood were used in private households in Germany. This value is subject to statistical error. With a probability of 95 %, the "true" value is between 23.76 and 30.14 million m<sup>3</sup>. 18.10 million m<sup>3</sup> of the total 26.95 million m<sup>3</sup> fuelwood consumption were used in wood-heated households without wood central heating systems and 8.85 million m<sup>3</sup> were used in households with wood central heating systems. In absolute terms, the use of forest logs was the largest in comparison to all other fuelwood assortments (16.3 million m<sup>3</sup>, approx. 60 % of total consumption), followed by wood pellets (3.79 million m<sup>3</sup>, approx. 14 % of total consumption).

Another result of the study is that in 2020, an average of 5.08 m<sup>3</sup> of fuelwood was used in homes heated with fuelwood. If the use is differentiated according to fuelwood assortments, large differences can be seen in some cases.

### Further Information

#### Contact

<sup>1</sup> Thünen Institute of Forestry

dominik.jochem@thuenen.de  
www.thuenen.de/wf

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