

The carbon footprint of Finnish second homes was assessed for the first time – a new calculator also reveals the emissions of individual second home users

Travel related to second homes is the largest source of emissions. However, there is a lot of variation between individual cottage and cabin users.



Caption: The carbon footprint of second homes consists of travel, energy consumption, services and goods, and boating. There is a lot of variation in the carbon footprints of individual Finnish second homes depending on their characteristics, standard of equipment and use. © Adobe Stock

Finland has over 500,000 second homes (cottages and cabins), and more than half of Finns spend time at these homes. An increasing number of people are also considering the environmental impacts of second homes. For the first time, the Finnish Environment Institute (Syke) calculated the greenhouse gas emissions generated by Finnish second homes. The study was funded by the Ministry of Agriculture and Forestry (Island Committee), the Ministry of the Environment and the Finnish Environment Institute. Other organisations involved in the cooperation were the Vapaa-ajan asukkaiden Liitto VAAL ry (Freetime Apartment Owners Association) and the Finnish Home Owners' Association.

According to a study carried out by the Finnish Environment Institute, the total carbon footprint of Finnish second homes is approximately 1.2 million tonnes of carbon dioxide equivalent per year. The average carbon footprint of one second home in Finland is approximately 2.3 tonnes of carbon dioxide equivalent per year. Second homes account for 7.5 per cent of the average annual carbon footprint of a Finnish resident. The

calculation is mainly based on data from 2021 and the emission factors used at the beginning of 2023.

The carbon footprint calculation of second homes includes energy consumption, travelling to and from the second homes, trips to services, boating, and consumption of goods and services. The calculation does not include construction of second homes, emissions from the land use sector, food and consumer goods, or second homes located abroad.

Most of the greenhouse gas emissions are caused by travel related to spending time at second homes. The carbon footprint of second homes consists of travel (58%), energy consumption (19%), goods and services (18%) and boating (5%).

In conjunction with carbon footprint calculation, experts also investigated the impacts of the energy and economic situation on the use of second homes in 2021–2023. The survey produced a large number of responses. This confirms that second home users are interested in energy and environmental issues.

“Finnish cottage and cabin users need and are prepared to search for information on the environmental effects of second home use, and many have already taken action to reduce energy consumption and climate emissions,” says **Marju Silander**, Executive Director of the Finnish Home Owners’ Association.

Major differences in the carbon footprints of second homes

There is a lot of variation in the carbon footprints of individual Finnish second homes depending on their characteristics, standard of equipment and use. In conjunction with the study, a calculator was prepared that allows everyone to determine the carbon footprint of their own cottage. Information on journeys to the second home, heating, electricity, boating, and consumption of goods and services is entered into the calculator.

“Our calculator helps people understand what causes the emissions produced by their cottage. For example, a long car journey is likely to increase the carbon footprint of a family travelling from the Helsinki Metropolitan Area to a second home in the Lakeland region or eastern part of Finland. On the other hand, winter heating of a cottage may have the greatest impact on the carbon footprint of people who live closer to their second homes,” says **Johanna Niemistö**, Senior Research Scientist at the Finnish Environment Institute.

The carbon footprint of second homes can be decreased in many ways. Emissions from travelling to a second home can be reduced by switching to a lower-emission mode of transport and reducing travel distances. Just like at home, people should conserve energy at their second home and select an energy-efficient winter heating solution. The carbon footprint calculator for second home users offers more tips on climate smart solutions.

The carbon footprint calculator for second homes will be launched on 22 March 2024 at the Spring Fair being held at Helsinki Expo and Convention Centre (Messukeskus). The event will take place on the Kevätlava stage at 13.00–13.30. Media representatives can familiarise themselves with the [carbon footprint calculator for second homes here](https://laskurit.hiilineutraalisuomi.fi) (laskurit.hiilineutraalisuomi.fi).

The calculator will be presented by the organisation that implemented the study and their partners at the Spring Fair. Member of Parliament **Pauli Aalto-Setälä** will comment on the topic. Further information on the programme is available on the [Spring Fair website](https://kevatmessut.messukeskus.com) (kevatmessut.messukeskus.com).

The Carbon footprint of second homes research project was funded by the Ministry of Agriculture and Forestry (Island Committee), Ministry of the Environment, and the Finnish Environment Institute. Other organisations involved in the cooperation were the Vapaa-ajan asukkaiden Liitto VAAL ry (Freetime Apartment Owners Association) and the Finnish Home Owners' Association. The study was carried out by the Finnish Environment Institute. The calculator was prepared in cooperation with the Towards Carbon Neutral Municipalities and Regions (Canemure) project.

Learn more about the materials

Carbon footprint calculator for second homes (in Finnish):
<https://laskurit.hiilineutraalisuomi.fi/mokki/>

Carbon Footprint of Second Homes (in Finnish): <https://urn.fi/URN:ISBN:978-952-366-593-4>

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